



Norton  
**Utilities**<sup>8.0</sup>  
For Macintosh<sup>®</sup>

User's Guide

# Norton Utilities™ for Macintosh® User's Guide

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# Emergency assistance

If you have an emergency, read through these recommendations on what to do, and which Norton Utilities for Macintosh tool can best solve your problem.

## Why you should start from the CD

It's not always best to install Norton Utilities if your disk has a problem. Do not install the program on a disk that needs repair or contains lost files. Installing Norton Utilities could destroy the data that you want to recover.

See “[Before installation](#)” on page 24.

If you purchased Norton Utilities to maintain your Macintosh and do not currently have a problem, you can install Norton Utilities for Macintosh.



Versions of Norton Utilities for Macintosh for both Mac OS 8.1 to 9.x and Mac OS X are included on the CD. Features and procedures for both versions are similar. However, for specific Mac OS 8.1 to 9.x documentation, refer to the PDF on the Norton Utilities CD 9 partition of the CD.

See “[Start from the CD](#)” on page 13.

If your disk is damaged or contains erased files that you want to recover, you can perform the most effective repairs when you restart from the CD. When you restart from the CD, you can:

- View and examine files and folders using DiskViewer from the Emergency Launcher. See “[Use DiskViewer](#)” on page 15.
- Choose from a variety of Norton Utilities tools from the Emergency Launcher. Tools include Norton Disk Doctor, Speed Disk, Volume Recover, UnErase, and Wipe Info. See “[Explore the Emergency Launcher](#)” on page 14.

**What tool should you use for your problem?**

- Have Norton Disk Doctor detect and repair problems that can't be fixed if you start normally. See “[Examine your startup disk](#)” on page 24.
- Optimize your startup disk. See “[Optimize a disk](#)” on page 72.

## What tool should you use for your problem?

Each Norton Utilities tool helps you solve a specific type of problem. Many recommendations include restarting from the CD. For more information about the Norton Utilities tools and their operating environments, see “[Protect disks with Norton FileSaver](#)” on page 41.

| Problem  | Recommendation  |
|--|---|
| Your computer won't start from your normal startup disk, or you see the message, Do You Want To Initialize? after booting from the CD. | In response to the message, click No or Cancel.<br>Restart from the CD and use Norton Disk Doctor to examine the disk and repair the damage or rebuild the disk's directory.<br>See “ <a href="#">Start from the CD</a> ” on page 13.<br><br>You can also use Volume Recover to repair or recover the disk.<br>See “ <a href="#">When to use Volume Recover</a> ” on page 48.<br>If disk damage can't be repaired, you can still recover data with UnErase.<br>See “ <a href="#">Recover files with UnErase</a> ” on page 63. |
| You see a folder with a blinking question mark (?).  | Use Norton Disk Doctor to examine the disk and repair the damage. If disk damage can't be repaired, you can still recover data with UnErase.<br>See “ <a href="#">Recover files with UnErase</a> ” on page 63.  |
| Your disks or files are damaged.   | Do not install Norton Utilities on a disk that you want to repair, or from which you want to recover data. New files might overwrite the files that you want to recover. Use Norton Disk Doctor to examine and repair the disk.<br>See “ <a href="#">When to use Norton Disk Doctor</a> ” on page 47.   |
| Your Mac won't start from your normal startup disk.  | Restart from the CD and examine and repair your startup disk.<br>See “ <a href="#">Start from the CD</a> ” on page 13.  |

| Problem   | Recommendation  |
|---|---|
| You accidentally reinitialized your hard disk.                          | Use Volume Recover to restore critical information to your disk.<br><br>See " <a href="#">Maintenance checklist</a> " on page 43.<br><br>Or, if you do not have Norton Utilities for Macintosh installed, use UnErase.<br><br>See " <a href="#">Start from the CD</a> " on page 13. |
| You accidentally deleted a file and emptied the trash.                  | Use Unerase or Volume Recover.<br><br>See " <a href="#">Recovering missing or erased files</a> " on page 63.  |
| You can't find a file, or you need to rescue files from a damaged disk. | Use UnErase or Volume Recover's Virtual Disk feature to recover files.<br><br>See " <a href="#">Recovering missing or erased files</a> " on page 63.  |
| You need to troubleshoot a problem.                                     | See " <a href="#">Troubleshooting computer problems</a> " on page 91.   |

## Start from the CD

See "[When disks do not show up in a list](#)" on page 94.

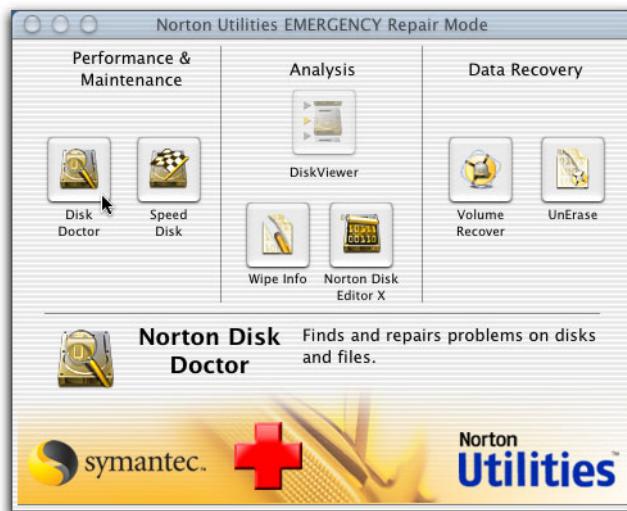
For an emergency situation, start from the CD and use Norton Disk Doctor to detect and repair disk problems.

### To start your computer from the CD

- ❖ Insert your CD into the CD-ROM drive and do one of the following:
  - While restarting your computer, hold down the **C** key. This will automatically open the Emergency Launcher's Repair Mode window. See "[What tool should you use for your problem?](#)" on page 12.
  - While restarting your computer, hold down the **Option** key. A screen will display with icons that include Norton Utilities OS X. Select the OS X icon and start your computer from the OS X partition on the CD. When startup is complete, the Emergency Launcher's Repair Mode window displays. See "[Explore the Emergency Launcher](#)" on page 14.
  - On the Apple menu, click **System Preferences**, **Startup Disk**, and then the Norton Utilities OS X icon. The Emergency Launcher's Repair Mode window displays.

- ! Depending on your computer, you may also be able to select the Mac OS 8.1 to 9.x version of Norton Utilities. This earlier version of Norton Utilities

does not include the Emergency Launcher. See “[Why use an earlier version of Norton Utilities?](#)” on page 18.



## Explore the Emergency Launcher

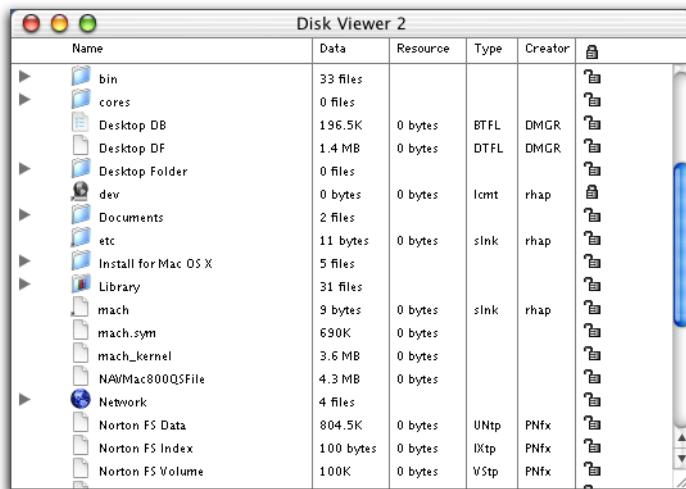
There are tools in the Emergency Launcher’s Repair Mode window that you can use when starting from the CD.

|                    |  |
|--------------------|--|
| DiskViewer         | Use DiskViewer to see which disks are mounted, and view folders and files on those disks. Use it when viewing an advance look at a rebuilt disk with Volume Recover to see what files have been recovered. From this view you can back up files to another disk, such as an external drive. No edits or changes can be performed on files from here.<br><br>See “ <a href="#">Use DiskViewer</a> ” on page 15. |
| Norton Disk Doctor | Finds and repairs disk problems.<br><br>See “ <a href="#">When to use Norton Disk Doctor</a> ” on page 47.   |
| Speed Disk         | Check, defragment, or optimize the selected disk.<br><br>See “ <a href="#">How Speed Disk optimizes</a> ” on page 72.  |
| Volume Recover     | Perform a FileSaver Search or use Create and View Virtual Disk on the selected disk.<br><br>See “ <a href="#">When to use Volume Recover</a> ” on page 48.   |

|                    |   |
|--------------------|---|
| UnErase            | Perform an UnErase Quick Search and other searches on the selected disk.<br><br>See " <a href="#">Recover files with UnErase</a> " on page 63.  |
| Wipe Info          | Wipe a file, an entire drive, or unused space on the selected disk.<br><br>See " <a href="#">When to use Wipe Info</a> " on page 75.  |
| Norton Disk Editor | This is a tool that is provided for use by data recovery experts. Using this tool is sometimes the only way that damaged files or disks can be salvaged or repaired. Do not make modifications to your disk using Norton Disk Editor unless you are a data recovery expert.<br><br>See " <a href="#">If Norton Utilities cannot solve your problems</a> " on page 91. |

## Use DiskViewer

DiskViewer is used to explore, view, and copy files when you start Norton Utilities from the CD.



### Navigating and viewing files in DiskViewer

DiskViewer displays all your files after you have started Norton Utilities from the CD.

**To navigate through DiskViewer**

- ❖ After clicking DiskViewer in the Launcher's Emergency Mode window, do one of the following:
  - Double-click folders and disks.
  - Click the triangles next to folder and disk names.

**To get information about a file or folder in DiskViewer**

- 1 Select the file or folder for which you want information.
- 2 On the Tasks menu, click **Get Info**.

**To adjust the DiskViewer column widths**

- ❖ Drag the divider between any two column headings.  
The entire DiskViewer window can also be resized vertically or horizontally.

**To open a file or folder**

- ❖ Do one of the following:
  - Double-click a file name.
  - Select a file or folder, then on the File menu, click **Open Selection**.



Opening a file in DiskViewer displays the first 31K of that file in text format. The file may not be formatted correctly and you may see unrecognizable characters. However, it will help you identify the content of the file.

You can have several DiskViewer windows open simultaneously. This makes it easy to focus on the content of different folders without having to scroll between them.

**To open multiple DiskViewer windows**

- ❖ Command-double-click a folder in a DiskViewer window to open a new window with that folder opened. Each new DiskViewer window will have a unique number.

**Copying and pasting items to other locations within DiskViewer**

DiskViewer allows you to copy and paste files and folders to another location within a window or to another DiskViewer window.

### To copy and paste files and folders

- 1 In the DiskViewer window, click an item's name or hold down the **Shift** key to select multiple items.
- 2 On the Edit menu, click **Copy**.
- 3 Navigate to another location in the Window, or navigate to a location in another DiskViewer window.
- 4 On the Edit menu, click **Paste**.

### Copying and pasting data from files

DiskViewer allows you to open files and copy text so that you can paste it elsewhere.

### To copy text from a file in DiskViewer

- 1 In the DiskViewer window, double-click a file name or hold down the **Shift** key to select multiple files.  
The first 31K of each file selected is displayed. The files may not be formatted correctly and you may see unrecognizable characters.
- 2 Select the desired text, then on the Edit menu, click **Copy**.
- 3 Navigate to another location, then on the Edit menu, click **Paste**.

## After working from the CD

After you have used a Norton Utilities tool from the Emergency Launcher, you will need to restart your computer.

### To restart after using a tool from the CD

- ❖ Quit Norton Launcher.  
Your computer will automatically restart after a few seconds. If your Macintosh does not automatically restart, press **Reset** or hold the Power button for five seconds.
- ! Make sure to quit all other Norton Utilities programs before you quit Norton Launcher when running from the CD. If you are running any other programs when you quit Norton Launcher, those programs will be forced to quit.

## If you can't start from the CD

See "Explore the Symantec support Web site" on page 46.

The System software included on the CD might not be sufficient to start newer Macintosh models issued after the release of this version of Norton Utilities. To find out if a newer CD or software is available, contact Symantec's Customer Service.

## Why use an earlier version of Norton Utilities?

Normally you would boot directly into the OS X version of Norton Utilities to solve your emergency problems. Like Mac OS 8.1 to 9.x, the newer OS X environment provides you with the tools to diagnose, repair, and maintain your computer directly from the CD in an emergency situation.

OS X provides additional functionality in the Volume Recover feature, letting you create a Virtual Disk to review before rebuilding your directories.

Some Macintosh models will also allow you to boot into the OS 9 bootable partition of the CD. From there, you can run the OS 9 compatible version of Norton Utilities. There are some advantages to being able to boot into the older operating system including:

- Access to a *Finder*
  - Access to Network Volumes while booted from the CD
-  For specific Mac OS 8.1 to 9.x documentation, refer to the PDF on the Norton Utilities CD 9 partition of the CD.

# About Norton Utilities for Macintosh

1



If you have an emergency, do not install Norton Utilities yet. See “[Emergency assistance](#)” on page 11.

Whenever you use your computer there is always the chance that a disk will fail, a file that you need will be lost or unreadable, or your Macintosh will not perform the way that it should. Norton Utilities for Macintosh helps you solve and prevent disk problems, repair damaged disks, recover deleted files, and optimize hard disk performance. Plus, you are able to keep Norton Utilities up-to-date over the Internet.

## What's new in Norton Utilities

Version 8 of Norton Utilities now includes:

- Symantec Launcher, a new main window from which you can open all Norton Utilities tools as well as other Symantec products that are installed on your computer
- An Emergency Launcher that provides a single Repair Mode screen from which to select available Norton Utilities tools when booting directly from the CD
- A new Virtual Disk feature that lets you view and recover files even before you rebuild your directories
- Optional booting into Mac OS X or Mac OS 8.1 to 9.x for most computers, that provides even more repair solutions
- Improved scheduling options that let you designate when you want the Norton FileSaver feature to record data or defragment files, which helps to support disk repair and file recovery

- Increased support and speed for disk repair, recovery, and optimization
- Enhanced file tracking and directory updates

## How disk damage and data loss occur

Unexpected problems can negatively affect the best protected computer. The logical structures of your hard disk might become corrupted. You might accidentally delete an important file, or an entire folder of important files. A crash might erase startup and configuration settings, making your computer unusable. Norton Utilities provides the best chance of recovering from these problems.

## How Norton Utilities works

Norton Utilities is a collection of tools that helps in the prevention of information getting lost or damaged. There are also tools that repair and recover files, and that maintain your computer in the event of an emergency.

### Prevent loss and damage of files and documents

Norton Disk Doctor finds and repairs disk problems. Even when your hard disk won't restart, you can restart from the CD and use Norton Disk Doctor and Norton Disk Navigator to make repairs. See "[When to use Norton Disk Doctor](#)" on page 47.

Norton FileSaver normally starts when your computer does and saves vital disk directory information that UnErase uses to recover lost files. If one of your disks becomes damaged, you can use Volume Recover to restore the disk using saved FileSaver information. See "[How Norton FileSaver protects your disks and files](#)" on page 41.

Speed Disk helps to defragment files and free space, and organizes files on your disks to provide faster performance. Speed Disk Profile Editor lets you customize file arrangements to match your computing activity. See "[How Speed Disk optimizes](#)" on page 72.

Wipe Info cleans selected files from your disk, preventing the information that you have deleted from being seen by anyone else. See "[When to use Wipe Info](#)" on page 75.

## Repair and recover files

Volume Recover works with Norton FileSaver to restore critical information to crashed or accidentally erased disks. It also rebuilds directories for better chances of data recovery. It provides an advance look at recovered directories, which helps to ensure that you are restoring the files that you need. See “[When to use Volume Recover](#)” on page 48.

UnErase is used in conjunction with Norton FileSaver. UnErase recovers virtually any deleted file or folder, saving you from recreating lost work or from searching back up disks for lost files. See “[When to use UnErase](#)” on page 48.

Norton Disk Editor is a tool provided for use by data recovery experts. Using this tool is sometimes the only way that damaged files and disks can be salvaged or repaired. Do not make modifications to your disk using Norton Disk Editor unless you are a data recovery expert.

Live Update connects to the Symantec Web site and retrieves program updates. See “[Update everything now](#)” on page 82.

Norton Scheduler automatically schedules Norton FileSaver, Defragmentation, and LiveUpdate events. See “[About Norton Scheduler](#)” on page 85.

Norton Disk Doctor finds disk problems to prevent emergencies. See “[When to use Norton Disk Doctor](#)” on page 47.

Wipe Info cleans selected files from your disk, preventing unwanted recovery of information that you have deleted. See “[How Wipe Info works](#)” on page 75.

## Is my computer protected now?

See “[FileSaver snapshots schedule](#)” on page 42.

When you have installed Norton Utilities, the Norton FileSaver tool takes its first snapshot of your hard disks within five minutes after you restart your computer. FileSaver continues to update the snapshot of your disk every 24 hours, or after each time you restart your computer. You can also schedule more frequent updates if you choose. Other components of Norton Utilities use this information to help recover after a crash.

See “[Maintenance checklist](#)” on page 43.

It is up to you to maintain your computer's good condition. Keeping Norton protection active on your system will help you to ensure your data's safety.

## Prepare for emergencies

In preparation for emergencies, you should take basic precautions to avoid inconvenience and data loss.

In addition to running Norton Utilities, do the following:

- Back up data files regularly. Keep more than just the most recent back up.
- Make sure that you always have the CD or other external device from which you can start your computer. See “[Start from the CD](#)” on page 13.

# Installing Norton Utilities for Macintosh

2



If you have an emergency, do not install Norton Utilities yet!  
See “[Emergency assistance](#)” on page 11.

Before installing Norton Utilities, take a moment to review the system requirements listed in this chapter.

Versions of Norton Utilities for both Mac OS X and Mac OS 8.1 to 9.x are included on the CD. For instructions on installing and using Norton Utilities for Mac OS 8.1 to 9.x, double-click the Norton Utilities CD 9 partition of the CD.

## System requirements

The following is required to run Norton Utilities for Macintosh:

- Macintosh OS X 10.1.5 or later
- Macintosh PowerPC processor, G3 or later  
(Beige G3 and original PowerBook G3 not supported)
- 128 MB of RAM
- 50 MB of available disk space for installation; 10% of total disk space available for optimization
- Internet connection to [download](#) program updates
- CD-ROM or DVD-ROM drive



Norton Utilities does not support Mac OS X versions 10.0 to 10.1.4 so you must upgrade to version 10.1.5 or later of Mac OS X.

## Before installation

Before you install Norton Utilities:

- Read the Read Me file for Mac OS X.
- Start from the CD and examine your startup disk and other mounted disks for damage. See “[Start from the CD](#)” on page 13.

Examining all mounted volumes ensures that Norton Disk Doctor detects any problems before you install.

## Read the Read Me file

The Read Me file on the CD contains information that was unavailable at the time that the User’s Guide was published.

### To read the Read Me file

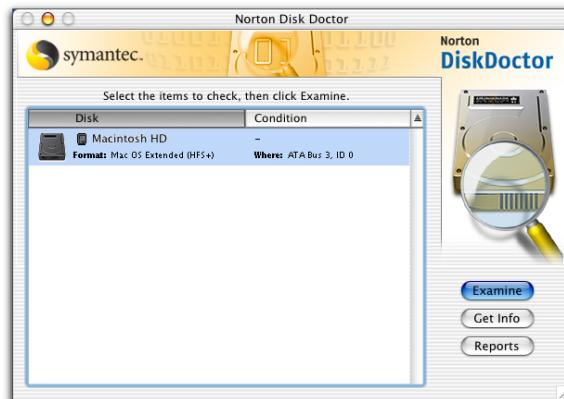
- 1 Insert the CD into the CD-ROM drive.  
If the CD window doesn’t open automatically, locate and double-click **Norton Utilities CD X**.
- 2 Double-click **Install for Mac OS X**.
- 3 Double-click the **Read Me** file.

## Examine your startup disk

To ensure that your startup disk has no problems, examine it before installing Norton Utilities.

## To examine your hard disk

- 1 Start your computer using the CD.
- 2 In the Emergency Launcher Repair Mode window, click **Norton Disk Doctor**.



See "When disks do not show up in a list" on page 94.

See "If Norton Disk Doctor finds a problem" on page 52.

- 3 In the Norton Disk Doctor window, select your startup disk. If a disk doesn't appear in the Norton Disk Doctor window, it might be damaged.
- 4 Click **Examine**. If Norton Disk Doctor finds errors during the examination, it prompts you to fix or skip the repairs. When the examination is complete, the results appear in the Summary window.
- 5 Click **Done**.
- 6 Restart your Macintosh before installing Norton Utilities.

## Installation

Install the program from the CD.

- Norton Utilities for Mac OS X protects both Mac OS X and Mac Classic.

The installation procedure requires that you enter an Administrator password. If you do not know if your login is an Admin login, you can check it in System Preferences.

### To check your login type

- 1 On the Apple menu, click **System Preferences**.
- 2 Do one of the following:
  - In Mac OS X 2.0 and later, click **Accounts**.
  - In Mac OS X 10.1.5, click **Users**.Your login name and type are listed.

### To install Norton Utilities

- 1 Restart your Macintosh before installing Norton Utilities.
- 2 Insert the CD into the CD-ROM drive.  
If the CD window doesn't open automatically, locate and double-click **Norton Utilities CD X**.
- 3 Double-click **Install for Mac OS X**.

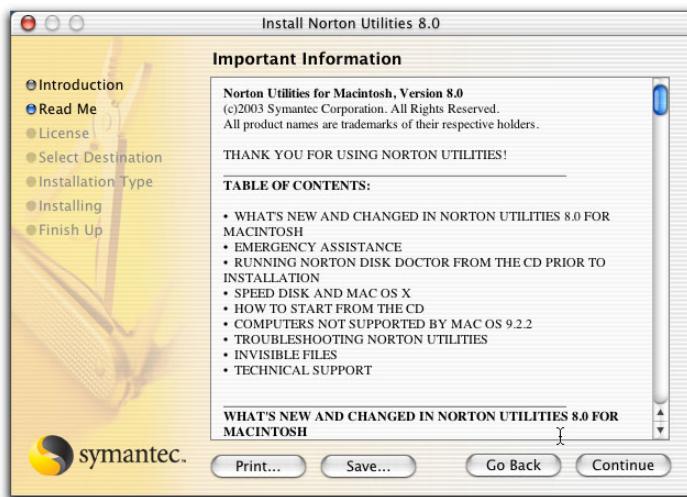


- 4 Double-click the **Norton Utilities Installer.mpkg** icon.
- !** If you are installing Norton Utilities on Mac OS X 10.1.5, the Authenticate window does not automatically appear. Click the lock in the lower-left corner of the Authorization window to open the Authenticate window and continue with the rest of the procedure.

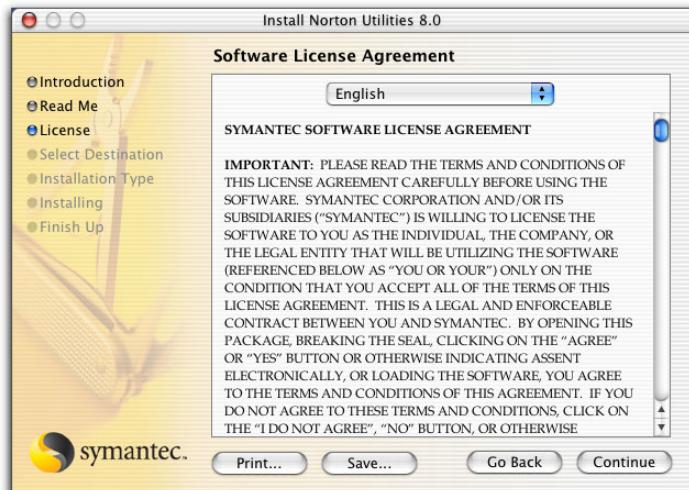
- 5 In the Authenticate window, type your Administrator password, then click **OK**.



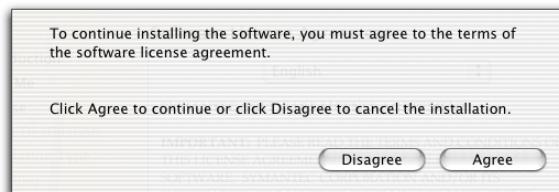
- 6 In the Welcome to the Norton Utilities 8.0 Installer window, click **Continue**.



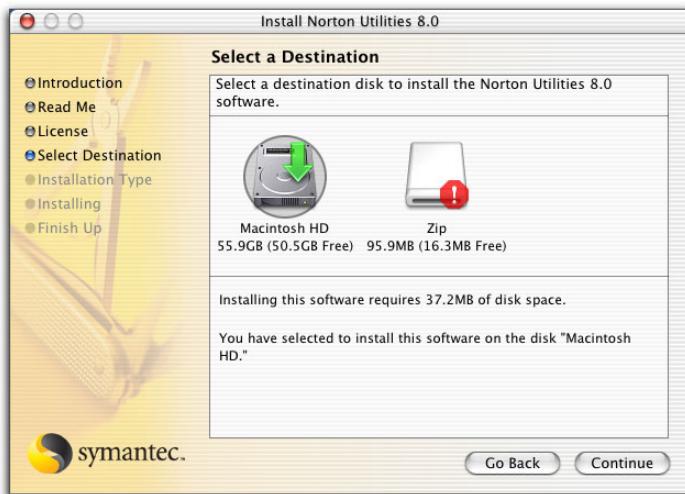
- 7 Review the Read Me text, then click **Continue**.



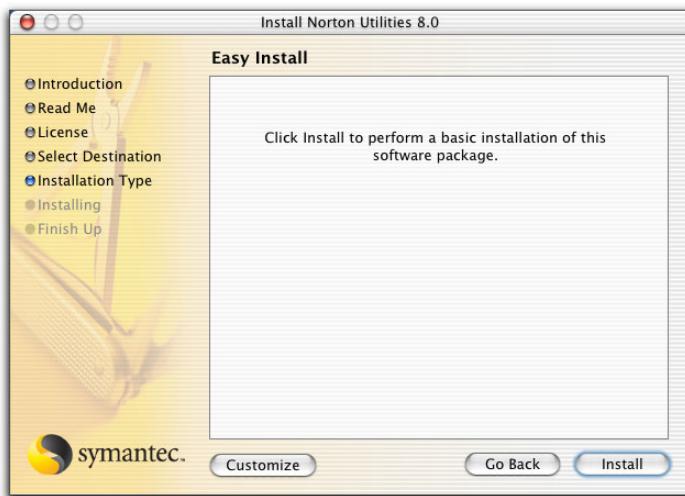
- 8 In the Software License Agreement window, click **Continue**.



- 9 In the agreement dialog box that appears, click **Agree**. If you disagree, you cannot continue with the installation.



- 10 Select the disk on which you want to install Norton Utilities, then click **Continue**.



- 11** In the installation type window, do one of the following:
- For a full installation, click **Install**. If you have other Symantec products installed on your computer, this button may say Upgrade.
  - To see a list of components being installed, click **Customize**. When you have finished reviewing the list, click **Install**.



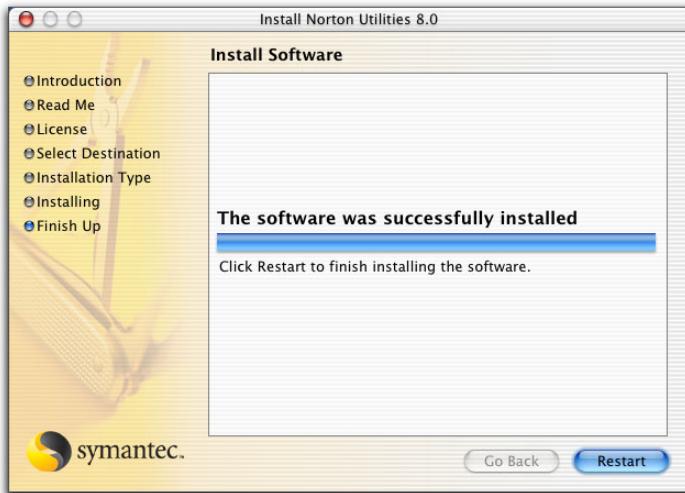
- 12** In the verification dialog box, click **Continue Installation**.



- 13** Choose whether or not you want to run LiveUpdate to ensure your software is up-to-date.



If you choose not run LiveUpdate now, it should be done at a later time to ensure that you have the most recent program updates to Norton Utilities.



- 14** When installation is complete, click **Restart**.

## Why you should restart your computer immediately

"How Norton FileSaver protects your disks and files" on page 41

When you restart your Macintosh, the Norton FileSaver tool starts working by taking its first snapshot of your hard disks within five minutes after you restart. Other Norton Utilities tools use this snapshot to help you recover after a crash.

## After installation

Now that you've installed Norton Utilities, you need to complete the following tasks.

| Tasks   | For more information                         |
|---|--|
| Make sure you have restarted your computer.                                     | See "If you cannot eject the CD" on page 32. |
| Register your software to take advantage of program updates and other benefits. | See "Register Norton Utilities" on page 32.  |

| Tasks   | For more information   |
|---|--|
| Check for late-breaking news and updates about your new software. Use the Internet link installed in the Norton Solutions folder. | See " <a href="#">For more information</a> " on page 44.                               |
| Get information about additional features and programs that are included on the CD.   | See " <a href="#">Explore the CD</a> " on page 43.                                     |
| Make sure that the Norton FileSaver update settings are protecting all of your mounted disks.                                     | See " <a href="#">How Norton FileSaver protects your disks and files</a> " on page 41. |
| Be sure you have run LiveUpdate to check for the most recent program files.   | See " <a href="#">When you should update</a> " on page 80.                             |
| Examine all of your disks to make sure that they are problem-free.  | See " <a href="#">When to use Norton Disk Doctor</a> " on page 47.                     |
| Learn more about Norton Disk Doctor examination messages.   | See " <a href="#">About Norton Disk Doctor messages</a> " on page 99.                  |

## If you cannot eject the CD

If you have trouble ejecting the CD after you restart your computer, try one of the following:

- Press the CD-ROM drive's eject button when your Macintosh restart chime sounds.
- On a newer Macintosh computer with a slot-loading CD-ROM drive, press the mouse button while starting up.

## Register Norton Utilities

Using your existing Internet connection, you can register Norton Utilities via the Internet.

### To register via the Internet

See "[If you connect to the Internet through America Online](#)" on page 34.

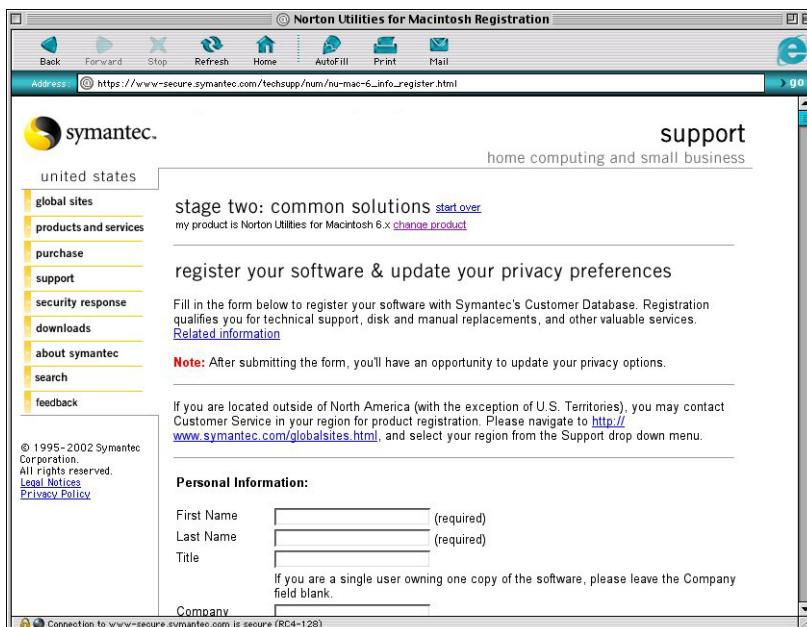
- 1 Connect to the Internet.  
If you use America Online (AOL) to connect to the Internet, you need to connect to it first.

- 2 In the Norton Solutions folder, double-click **Register Your Software**.



Your default Internet browser displays the Symantec support page.

- 3 On the support page, click **I am a home/small business user**.
- 4 On the register your software page, click **Norton Utilities for Macintosh**.
- 5 Select the correct version of the product.
- 6 Click **continue**.



The screenshot shows a web browser window titled "Norton Utilities for Macintosh Registration". The address bar contains the URL [https://www-secure.symantec.com/techsupp/num/nu-mac-6\\_info\\_register.html](https://www-secure.symantec.com/techsupp/num/nu-mac-6_info_register.html). The page itself is from symantec.com and is titled "support home computing and small business". A sidebar on the left lists links such as "global sites", "products and services", "purchase", "support", "security response", "downloads", "about symantec", "search", and "feedback". The main content area starts with "stage two: common solutions" and a note about the product being Norton Utilities for Macintosh 6.x. It then asks the user to "register your software & update your privacy preferences". A note states that filling out the form qualifies the user for technical support, disk and manual replacements, and other valuable services. A "Note" below says users will have an opportunity to update privacy options after submission. A note at the bottom indicates that if the user is located outside of North America, they can contact Customer Service in their region. The "Personal Information" section requires the user to enter their first name, last name, and title. A note specifies that if the user is a single user owning one copy of the software, they should leave the Company field blank. The "Company" field is currently empty. At the bottom of the page, a message states "Connection to www-secure.symantec.com is secure (RC4-128)".

- 7 On the registration page for Norton Utilities for Macintosh, type all of the required information.
- 8 Click **Submit Registration**.

## Read Late Breaking News

Norton Utilities for Macintosh installs a Late Breaking News link. Use this link to get the latest information for your installed software.

### To read Late Breaking News

- 1 Connect to the Internet.  
If you use America Online (AOL) to connect to the Internet, see “[If you connect to the Internet through America Online](#)” on page 34.
- 2 In the Norton Utilities for Macintosh folder, double-click **Late Breaking News**.



Your default Internet browser displays the Symantec Late Breaking News Web page for your product.

## If you connect to the Internet through America Online

If you use America Online (AOL) as your Internet service provider (ISP), you must connect to AOL before you go to the Symantec software registration page or view the Late Breaking News.

### To connect to the Symantec Web site through AOL

- 1 Log on to AOL.
- 2 On the AOL Welcome page, click the AOL Internet browser.
- 3 Move the AOL browser and any other open AOL windows out of the way.
- 4 In the Norton Utilities window, do one of the following:
  - Double-click **Register Your Software**.  
Continue with the registration procedure. See “[Register Norton Utilities](#)” on page 32.
  - Double-click **Late Breaking News**.  
Continue with the procedure for reading the news. See “[Read Late Breaking News](#)” on page 34.
- 5 Disconnect from AOL.

# If you need to uninstall Norton Utilities

If you need to remove the program from your computer, use the Symantec Uninstaller on the CD. The process is faster if all other programs are closed before you uninstall the program.

The uninstall procedure requires that you enter an Administrator password. If you do not know if your login is an Admin login, you can check it in System Preferences.

## To check your login type

- 1 On the Apple menu, click **System Preferences**.
- 2 Do one of the following:
  - In Mac OS X 2.0 and later, click **Accounts**.
  - In Mac OS X 10.1.5, click **Users**.Your login name and type are listed.

## To uninstall Norton Utilities

- 1 Insert the CD into the CD-ROM drive.  
If the CD window doesn't open automatically, locate and double-click **Install for Mac OS X**.
- 2 Double-click the **Uninstall** icon.
- 3 Double-click **Symantec Uninstaller**.
- 4 In the Uninstall Symantec Products window, check the products that you want to uninstall.
- 5 Click **Uninstall**.
- 6 Confirm that you want to delete the product.
- 7 In the Authenticate window, type your Administrator password, then click **OK**.
- 8 In the window that displays the list of deleted items, click **Close**.
- 9 In the Uninstall Symantec Products window, click **Quit**.



# Norton Utilities for Macintosh basics

# 3

Basic information about Norton Utilities includes:

- # Starting and exiting the program
- # Using and customizing the Norton Launcher and Norton Launcher toolbar
- # Quick Menus and shortcuts
- # Maintaining your Macintosh with the Norton FileSaver feature
- # Using Help and getting more information about Norton Utilities

## How to start and exit Norton Utilities

The Norton Launcher is a convenient window from which you can launch the Symantec products that are installed on your computer. Use Norton Launcher to access the features in Norton Utilities and any other Symantec product that is installed on your Macintosh.

If you're not certain what a particular tool or program is used for, roll your mouse over the icon and a brief description will display at the bottom of Norton Launcher.

### Open Norton Launcher

Norton Launcher is installed in the Norton Applications folder.

### To open Norton Launcher

- ❖ In the Norton Applications folder, double-click **Norton Launcher**.



## Open a program

Once you have started Norton Launcher, you can open any available program.

### To open a program from Norton Launcher

- 1 Open Norton Launcher.
- 2 In the Norton Launcher window, click an icon.

## Customize the Norton Launcher toolbar

You can add any icon to the Norton Launcher toolbar, which is located directly above the Launcher. You can also hide or display the toolbar.

## Hide or display the Norton Launcher toolbar

If the Norton Launcher toolbar is hidden, you might have to display it before you can customize it.

### To hide or display the Norton Launcher toolbar

- 1 Open Norton Launcher.
- 2 On the Window menu, select one of the following. Your options are:

|              |                                      |
|--------------|--------------------------------------|
| Hide Toolbar | Conceals the Norton Launcher toolbar |
| Show Toolbar | Displays the Norton Launcher toolbar |

### Add icons to the Norton Launcher toolbar

You can customize the Norton Launcher toolbar by adding, deleting, or rearranging icons.

#### To add icons to the Norton Launcher toolbar

- 1 Open Norton Launcher.
- 2 On the Window menu, click **Customize Toolbar**.

In the window of available icons, drag an icon to the Norton Launcher toolbar.

 You can also add the Norton Launcher to the Dock by dragging its folder icon from the Applications folder to the right-hand side of the Dock.

## Customize the Norton QuickMenu

The Norton QuickMenu appears as the yellow-and-black Symantec logo on the right side of the menu bar. If you do not want the Norton QuickMenu to appear on your menu bar, you can hide it. You can also change the items that appear on the menu.

#### To hide the Norton QuickMenu

- 1 On the Norton QuickMenu, click **Norton QuickMenu > Preferences**.
- 2 In the Norton QuickMenu preferences window, uncheck **Enable Norton QuickMenu**.
- 3 On the System Preferences menu, click **Quit System Preferences**.

#### To show the Norton QuickMenu

- 1 On the Apple menu, click **System Preferences**.
- 2 In the System Preferences window, click **Norton QuickMenu**.

- 3 In the Norton QuickMenu preferences window, check **Enable Norton QuickMenu**.
- 4 On the System Preferences menu, click **Quit System Preferences**.

#### To change what appears on the Norton QuickMenu

- 1 On the Norton QuickMenu, click **Norton QuickMenu > Preferences**.
- 2 In the Norton QuickMenu preferences window, uncheck the items that you do not want to appear on the menu.
- 3 On the System Preferences menu, click **Quit System Preferences**.

## Customize your toolbars

Norton Utilities lets you customize the toolbars to fit your needs.

The Setup window, Access History log, and Connected Users report all have toolbars that you can customize to suit your needs.

#### To customize your toolbars

- 1 Open Norton Utilities.
- 2 Open the window with the toolbar that you want to change.
- 3 On the Window menu, click **Customize Toolbar**.
- 4 In the toolbar dialog box, drag the icons into and out of the toolbar at the top of the window until you have the set that you want. You can change the location in which an icon appears by dragging it to the desired location.
- 5 If you want to return the toolbar to its original appearance, drag the default set of icons at the bottom of the dialog box to the toolbar.
- 6 To change the default icon descriptions, select one of the following:
  - Icon & Text
  - Icon Only
  - Text Only
- 7 When the toolbar appears the way that you want it, click **Done**.

## Use Norton Utilities shortcuts

You can access Norton Utilities tools with various drag-and-drop operations.

## Use drag-and-drop operations

Drag a disk or volume icon to any of the following Norton Utilities program icons.

| Program icon       | Result of drag-and-drop operation   |
|--------------------|---|
| Norton Disk Doctor | Examine the selected disk.  |
| Speed Disk         | Check and defragment or optimize the selected disk.                           |
| UnErase            | Perform an UnErase Quick Search on the selected disk.                         |
| Wipe Info          | Wipe unused space on the selected disk.                                       |
| Volume Recover     | Perform FileSaver Searches and Create and View Virtual Disk on selected disk. |
| Norton Utilities   | Open Norton Disk Doctor.  |

## Protect disks with Norton FileSaver

You are less likely to experience problems with your Macintosh when you use Norton Utilities for preventive maintenance. Norton FileSaver is an important tool used for disk and file recovery.

### How Norton FileSaver protects your disks and files

After you install Norton Utilities, Norton FileSaver maintains an updated record of your startup disk's directory and files. The first FileSaver snapshot is taken five minutes after you restart your computer following installation of Norton Utilities. It is normally scheduled to take an updated snapshot every day at noon, as well as five minutes after each restart.

This information is used by UnErase, Norton Disk Doctor, and Volume Recover to facilitate disk and file recovery. You can access Norton FileSaver and the Scheduler on the Window menu or from the Symantec Launcher.

Norton FileSaver supports disk repair and file recovery in Norton Utilities. It works in the background and takes a snapshot of the disk directory structure. It saves critical disk and directory structure information that Norton Disk Doctor, UnErase, and Volume Recover use to restore a disk.

## Using the FileSaver window

In the Norton FileSaver window, you can enable or disable the following type of activity for each disk:

- Update Disk Directory Information.
- Track Deleted Files & Folders.
- Defragment Files. See “[About optimization and file fragmentation](#)” on page 71.

 Except for the Defragment Files column, FileSaver default settings have each disk and function already selected for best protection. For Defragment Files, check the disk that you wish to optimize. See “[Optimize a disk](#)” on page 72.

### To maintain the FileSaver tool

- 1 On the Apple menu, click **System Preferences**.
- 2 In the System Preferences window, click **Norton FileSaver**.
- 3 In the Norton FileSaver window, do any of the following:
  - Check box to update disk and directory information for each disk.
  - Check box to track deleted files and folder for each disk.
  - Check box to defragment each disk according to settings in the Norton Scheduler. See “[Defragment files](#)” on page 73.
  - Turn FileSaver on or off. Remember that FileSaver will not be updating snapshots of your disks, or tracking deleted files, until you turn it back on.

## FileSaver snapshots schedule

See “[Schedule FileSaver snapshots](#)” on page 87.

FileSaver is preset to update disk information daily at noon. To change or add to this schedule, use the Norton Scheduler.

# Maintenance checklist

With the exception of Norton FileSaver, most Norton Utilities tools do not run automatically. To maintain your computer's good condition, perform the following tasks regularly.

| Task and benefits  | For more information   |
|--|--|
| Run Norton Disk Doctor for a comprehensive check of file-level problems before every back up and before running Speed Disk.  | See " <a href="#">When to use Norton Disk Doctor</a> " on page 47.                     |
| Run Speed Disk any time that you notice your disk slowing down. This change in performance can be due to excessive fragmentation of files or poor placement of files on the disk.                                  | See " <a href="#">How Speed Disk optimizes</a> " on page 72.                           |
| Keep Norton FileSaver enabled to keep track of your files. It also saves critical disk information that can be used by Norton Disk Doctor, Volume Recover, and UnErase to restore your disk or recover your files. | See " <a href="#">How Norton FileSaver protects your disks and files</a> " on page 41. |
| Run LiveUpdate to keep your program files up-to-date. LiveUpdate downloads and installs the latest program updates to ensure that your product is current.   | See " <a href="#">Update procedures</a> " on page 82.                                  |

## Explore the CD

In addition to the Norton Utilities OS X installer and program software, there are other items on the CD.

|                                    |  |
|------------------------------------|--|
| Documentation folder               | Located inside the Install for Mac OS X folder, this Documentation folder contains the User's Guide in PDF format and installation files for Adobe Acrobat Reader. The PDF version of the User's Guide contains additional material and details not found in the printed version.  |
| Norton Utilities for OS 8.1 to 9.x | If you are running Mac OS 8.1 to 9.x you can still use Norton Utilities. Some computers will allow you to run either this version or the Mac OS X version. Other computers allow you to only run one or the other. The OS 8.1 to 9.x program is found by double-clicking the Norton Utilities CD 9 partition of the CD.<br><br>See " <a href="#">Start from the CD</a> " on page 13. |
| SimpleText application             | Lets you read the Norton Utilities Read Me file in Mac OS 8.1 to 9.x folder.   |

# For more information

Norton Utilities provides instructional material in three formats.

|               |   |
|---------------|---|
| User's Guide  | The User's Guide provides basic conceptual information and procedures for using all of the features of Norton Utilities. Use the printed User's Guide if you cannot access the online material for any reason. Technical terms that are italicized in the User's Guide are defined in the glossary, which is available in both the User's Guide PDF and Help. |
| Built-in Help | Help includes all the material contained in the User's Guide, plus expanded conceptual information, procedural details, and a glossary for definitions of technical terms. Use Help to answer questions while you are using Norton Utilities.<br><br>See " <a href="#">Access Help</a> " on page 44.  |
| PDF           | The PDF is an electronic version of the User's Guide that you can use if you prefer to look for information online in a book-like format or if you want to provide additional copies of the User's Guide. The PDF also includes a glossary for definitions of technical terms.<br><br>See " <a href="#">Access the User's Guide PDF</a> " on page 45.         |

In addition to this material, there is a Read Me file on the CD. Check the Read Me file before you install Norton Utilities for late-breaking information.

Finally, you can always check the Symantec Web site for information about Norton Utilities. You can also use the Web site to subscribe to the Symantec Security Response newsletter, which provides you with the latest information about virus and other *threats* and anti-threat technology.

## Access Help

Opening Help displays the Apple Help Viewer with a list of Help topics. When you open Help in the Launcher, you find a complete list of topics to scroll through. Accessing Help from a specific feature provides a smaller list of topics.

### To access Help

- ❖ On the Help menu, click **Help**.

Tips for exploring Help:

- To search for a specific topic, in the search field at the top of the Help window, type the related term, then click Ask.
- Terms that are underlined and blue in the text are defined in the glossary. Click the word to go to its definition. Click the left-arrow button to return to the topic.
- You can view the same information whether you access Help from the Launcher or from a specific feature.
- Links to related topics appear at the end of a topic.
- Some topics include links that open the window in which you can begin the task described.

## Access the User's Guide PDF

The User's Guide is available in printable Adobe Acrobat PDF format on the CD.

### To open the PDF

- 1 Insert the CD into the CD-ROM drive.  
If the CD window doesn't open automatically, locate and double-click **Norton Utilities CD X**.
- 2 Double-click **Install for Mac OS X**.
- 3 In the Install for OS X folder, double-click the **Documentation** folder.
- 4 Double-click the **Norton Utilities User Guide** PDF.

You can also drag the PDF to your hard disk.

Tips for exploring the PDF:

- When you open the PDF, the table of contents appears in the left margin. In the table of contents, click a heading to jump to that topic.
- To search for a specific topic, use the Find command on the Edit menu.
- Italicized terms in the text are defined in the glossary. Click the word to go to its definition. Click Go to Previous View to return to the topic.

## Open the Read Me file

The Read Me file on the CD contains information that was unavailable at the time that the User's Guide was published. The Read Me file contains information for both the Mac OS 8.1 to 9.x and Mac OS X versions of Norton Utilities.

### To open the Read Me file

- 1** Insert the CD into the CD-ROM drive.  
If the CD window doesn't open automatically, locate and double-click **Norton Utilities CD X**.
- 2** Double-click **Install for Mac OS X**.
- 3** Double-click the **Read Me** file.

## Explore the Symantec support Web site

The Symantec support Web site provides extensive information about Norton Utilities. You can find updates, patches, Knowledge Base articles, and virus removal tools.

### To explore the Symantec support Web site

- 1** On the Internet, go to [www.symantec.com/techsupp](http://www.symantec.com/techsupp)
- 2** On the support Web page, under home/small business, click **continue**.
- 3** On the home computing and small business Web page, click **start online support**.
- 4** Follow the instructions on the Web site to get the information you need.

If you cannot find what you are looking for using the online support pages, try searching the Web site.

### To search the Symantec support Web site

- 1** On the left side of any Web page in the Symantec support Web site, click **search**.
- 2** Type a word or phrase that best represents the information for which you are looking.  
For tips on entering your search text, click **help** at the bottom of the page.
- 3** Check the area of the Web site that you want to search.
- 4** Click **search**.

# Examining, repairing, and recovering disks

# 4

During its examination process, Norton Disk Doctor runs a series of user-configurable tests. When repairable problems are found, Norton Disk Doctor gives you the option of repairing or ignoring them. Regular examination of your disks is the best way to prevent disk damage and data loss.

See "Start from the CD" on page 13.

Some startup disk repairs can only be performed when your computer is restarted from the CD or another external disk. If you have a damaged or crashed disk, start from the CD to run Norton Disk Doctor.

If Norton Disk Doctor cannot repair a disk, use Volume Recover to restore it or rebuild its directory. If a disk is unrecoverable, recover files and file contents with UnErase.

See "How Norton FileSaver protects your disks and files" on page 41.

Successful repairs to disk and directory information sometimes depend on FileSaver data. Be sure to keep FileSaver files up-to-date.

## When to use Norton Disk Doctor

See "Set Norton Disk Doctor test preferences" on page 49.

Examine your disks with Norton Disk Doctor regularly, for example, before you back up your data files and before you run Norton Speed Disk.

Norton Disk Doctor checks your disk for problems by running a series of tests that check the major components of your disk, directories, and files. Exclude any tests that you don't want to run.

See "Run tests with Norton Disk Doctor" on page 50.

Unless you have specified that it repair problems automatically, Norton Disk Doctor requests permission before it performs repairs.

If problems are found during the examination, Norton Disk Doctor displays a Problem Found dialog box. Sometimes Norton Disk Doctor can repair the problems immediately. If not, it can create an *alias* to help you find and fix the problem files when the disk examination is complete.

Depending on the type of damage that is found while running the tests, Norton Disk Doctor might advise you that your options are to run either Volume Recover or UnErase.

## When to use Volume Recover

See "Recover damaged disks with Volume Recover" on page 54.

Volume Recover restores data on badly damaged disks. Use Volume Recover in the following situations:

- Your disk is damaged and doesn't appear on the desktop.
- Your disk doesn't appear in the Norton Disk Doctor, UnErase, or Volume Recover window.
- Your disk experiences a problem that Norton Disk Doctor is unable to resolve.
- Your disk has been reinitialized or accidentally erased, or you changed your partition structure using *driver* software.

See "Restore a disk using FileSaver information" on page 60.

Norton Disk Doctor might recommend using Volume Recover if it is unable to solve a problem. Volume Recover should be used if you have accidentally erased so many files that Norton FileSaver does not track them all individually, or if you accidentally deleted a folder that contained many files.

## When to use UnErase

See "Recover files with UnErase" on page 63.

If your disk is not damaged, use UnErase to recover files unintentionally thrown away. Chances of recovery are better if you use UnErase as soon as possible after an accidental deletion. You can also use UnErase to try to salvage files from a damaged disk that cannot be repaired by Norton Disk Doctor or Volume Recover.

Chances of recovery are also better if you keep Norton FileSaver files current, and if your disk fragmentation level is low.

# Start Norton Disk Doctor

If you are using Norton Disk Doctor to repair a startup disk, restart from the CD before you run Norton Disk Doctor. See “[Get information about disks, folders, and files](#)” on page 61.

- ! Make sure you quit all other applications that are running before using Norton Disk Doctor to examine a disk.

See “[When disks do not show up in a list](#)” on page 94.

## To open Norton Disk Doctor

- 1 Open Norton Utilities.
- 2 In the Norton Utilities window, click **Norton Disk Doctor**.

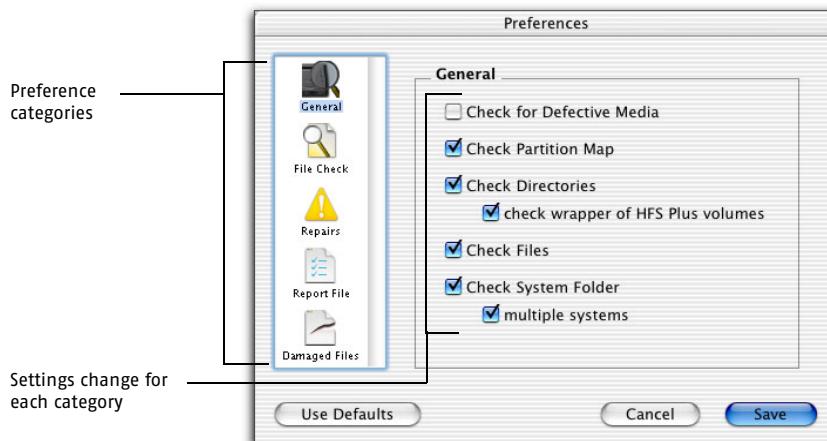
## Set Norton Disk Doctor test preferences

Although the default settings are appropriate for most testing, Norton Disk Doctor tests can be configured to reflect your work needs or test situations. For example, to have Norton Disk Doctor diagnose but not repair a disk, specify the options in the Repair Preferences.

The Preferences dialog box displays a list of categories that are represented by icons. Each category has detailed subcategories.

## To set Norton Disk Doctor test preferences

- 1 Open Norton Disk Doctor.
- 2 On the Norton Disk Doctor menu, click **Preferences**.



- 3 In the list of preference categories, click a category icon.
- 4 Continue selecting categories and setting preferences.
- 5 Click **Save**.  
The changes take effect the next time that you examine a disk.

## Reset Norton Disk Doctor test preferences

If you have made preference changes, you can reset Norton Disk Doctor back to the original default settings.

### To reset Norton Disk Doctor test preferences

- 1 Open Norton Disk Doctor.
- 2 On the Norton Disk Doctor menu, click **Preferences**.
- 3 Click **Use Defaults**.

## Select the disks to examine

When you open Norton Disk Doctor, the disks that are available for examination appear in the list. In the disk column, the name of the disk and an icon representing its type appear.

The small icons to the right of the disk icons indicate each disk's potential for examination and repair.

|                  |  |  |
|------------------|--|--|
| Macintosh icon   |  | The disk contains the active System file of your Macintosh.  |
| Application icon |  | The disk contains the Norton Disk Doctor application.  |
| Lock icon        |  | The disk is write-protected and Norton Disk Doctor can examine the disk, but cannot perform any repairs on it. |

## Run tests with Norton Disk Doctor

During the disk examination, Norton Disk Doctor checks every area of your disk, looking for problems that need immediate attention as well as conditions that could create future problems. A hard disk examination might take time, but Norton Disk Doctor keeps you informed and provides suggestions to help you decide how to handle problems.

If you are unsure about a repair decision, skip it. After the examination, print the Norton Disk Doctor Report and refer to it when you examine the disk again.

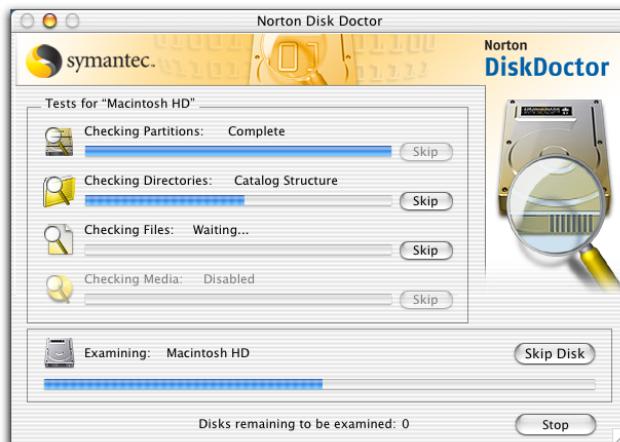
## Examine disks

See "Examine your startup disk" on page 24.

If major problems are found on your startup disk, restart your computer from the CD and run Norton Disk Doctor to repair the problems.

### To examine a disk

- 1 In the Norton Disk Doctor main window, select one or more disks. If the disk is a floppy disk or other type of removable media, insert it now.
- 2 Click **Examine**.



This window shows the progress of Norton Disk Doctor as it runs its series of tests on each disk.

- 3 You can select any of the following during an examination. Your options are:

|           |   |
|-----------|---|
| Skip      | Skip a test.  |
| Skip Disk | Skip the remaining tests for this disk. If another disk is selected, Norton Disk Doctor proceeds to examine it. |
| Stop      | Stop examining all disks.   |

If your disk is damaged severely and you choose not to fix problems, Norton Disk Doctor might be unable to finish diagnosing the disk. Norton Disk Doctor informs you when it cannot continue.

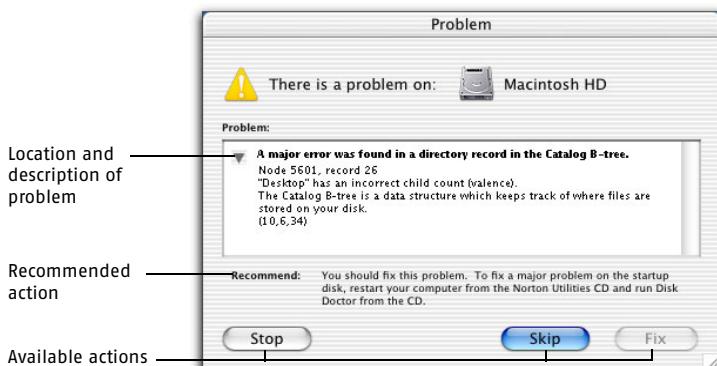
**Start Norton Disk Doctor**

When Norton Disk Doctor is finished, it displays the results for each disk tested in a report window.

- !** An error found might be caused by the disk directory changing during the examination process. To determine whether a reported problem is a false error, you can run Norton Disk Doctor again from your hard drive to see whether the error appears again. If it does not appear again, then you can safely ignore it.

## If Norton Disk Doctor finds a problem

When Norton Disk Doctor encounters a problem, it displays an *alert*.



The Problem dialog box describes the type of error and the files or other disk elements that are affected:

- If the problem can be fixed, Norton Disk Doctor displays the recommended action and lets you decide whether to fix it.
- If Norton Disk Doctor cannot fix the problem, it makes a recommendation. See “[About Norton Disk Doctor messages](#)” on page 99.
- If Norton Disk Doctor detects damage it cannot repair, Volume Recover may be recommended. See “[Recover damaged disks with Volume Recover](#)” on page 54.

### To respond to alerts

- ❖ Select one of the following:
  - FixRepair the problem in the selected file and continue with the rest of the tests.
  - Fix AllRepair the problem in all of the listed files.
  - ContinueSkip the repair and continue examining the disk.
  - StopStop the disk examination.

You might need to restart your computer before the repairs take effect.

If a disk was not originally mounted on the Desktop, Norton Disk Doctor will attempt to remount the disk when the examination is finished.

## If Norton Disk Doctor can't complete the examination

["When to use Volume Recover"](#)  
on page 48

If an unexpected problem occurs and Norton Disk Doctor is unable to complete the examination, try running the examination again. If that fails, try to solve the problem using Volume Recover.

## If Norton Disk Doctor can't repair a problem

See ["Recover files with UnErase"](#) on page 63.

Occasionally, a disk or file is so severely damaged that no software program can fix it. If a disk is badly damaged, Norton Disk Doctor displays a dialog box that tells you to back up and reformat the disk. If a file is badly damaged, try to recover its contents with UnErase.

For more information, see the online Help, or the User's Guide PDF on the CD.

# Recover damaged disks with Volume Recover

The Volume Recover feature restores your disk in one of two ways:

| Function   | For more information   |
|--|--|
| Using the Create and View Virtual Disk function, Volume Recover will create a Virtual Disk - an advance look of the rebuilt disk that you can compare with the original damaged disk. From this Virtual Disk, you can copy files and documents to another volume for backup purposes, or you can choose to rebuild the original disk to the state of the Virtual Disk.               | See "Use the Create and View Virtual Disk function" on page 56.      |
| Using the FileSaver Search, existing FileSaver files can be used to recreate a damaged disk to the state that it was in when Norton FileSaver recorded the information. FileSaver files contain critical information that identifies the structure of a disk. By restoring this information, you might be able to return the disk to a condition that Norton Disk Doctor can repair. | See "How Norton FileSaver protects your disks and files" on page 41. |

## What Volume Recover can't do

Volume Recover cannot recover a hard disk that has been low-level formatted, as this type of initialization completely erases all information on the disk.

See "What tool should you use for your problem?" on page 12.

Volume Recover does not recover data to your Startup Disk. On a locked disk, you can create a Virtual Disk, but you cannot save the Virtual Disk or change the original disk's directory.

## Identify the preferred recovery method

Both the Create and View Virtual Disk and FileSaver Search features provide efficient ways to recover your data. To help you choose a method, use the following table.

| Condition  | Recommended action           |
|--|------------------------------|
| You have just purchased this product because you have lost or damaged files. | Create and View Virtual Disk |
| The FileSaver information is older than the files you wish to recover.       | Create and View Virtual Disk |

| Condition   | Recommended action           |
|---|------------------------------|
| You know that Norton FileSaver was not active for the damaged disk or the information on the disk is damaged. | Create and View Virtual Disk |
| You are not sure which search to perform.   | Create and View Virtual Disk |
| FileSaver is running and it captured a snapshot of your data before it was lost or damaged.                   | FileSaver Search             |

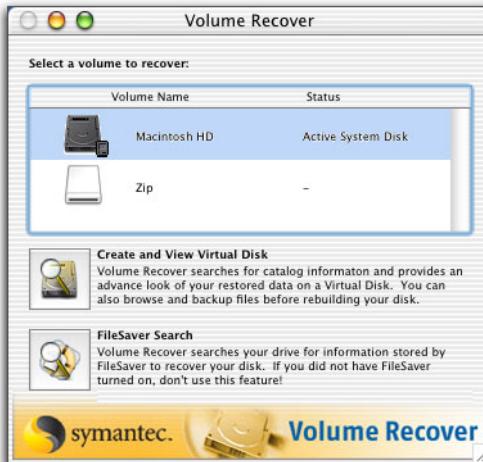
When FileSaver information is out-of-date, restoring old FileSaver data can make future data recovery efforts difficult. An exception to this is a case in which you have not used your computer for an extended period of time, meaning that you haven't updated or changed your files simply because your computer has not been used. In this situation, FileSaver data might prove useful.

## Select the disk to recover

See ["When disks do not show up in a list" on page 94](#). Volume Recover scans for disks. The available disks appear in the Volume Recover main window.

### To open Volume Recover

- In the Norton Launcher, click **Volume Recover**.



- In the Volume Recover main window, select the volume or disk whose information you want to recover.

### If you don't see the disk that you're looking for

Your disk's name may appear different, or be unrecognizable, due to damage to the disk's structures. You may be able to recognize it from information such as the size or location of the disk provided in the Get Info dialog box.

## Use the Create and View Virtual Disk function

If missing files are not listed in a disk's directory because damage to the directory prevents the corresponding directory entries from being found, you can use the Create and View Virtual Disk function.

You can use the Create and View Virtual Disk function to rebuild damaged or missing directory data even if there is no FileSaver data for the disk. Get Info also lets you change the names of files and folders.

Volume Recover scavenges the damaged disk for directory information and rebuilds the structure according to the file records and other information found.

Using Create and View Virtual Disk allows you to scan the hard disk for all file records and creates a Virtual Disk of the rebuilt disk that contains those records. After you have examined the Virtual Disk, you can choose to have Volume Recover permanently write the rebuilt directory to your disk. If you prefer, you can backup data onto another disk, such as an external drive, without altering the original disk. If your disk is badly damaged, the Create and View Virtual Disk function might need to search the entire disk to ensure that all data exists.



The recovery of any additional files found by this search might result in the loss of other valid files, if the additional files have the same names as the more recent files. This is particularly true when the directories on the disk are *fragmented*. If the disk was recently optimized with Speed Disk, there is little risk of file loss.

### If you are running Mac Classic

In order to open Classic applications while in Explore Mode, you will need to set the Classic preference. When this preference is set, the Explore Mode screen background will not appear, but you will still be in Explore Mode.

### To set the Classic preference

- 1 On the Volume Recover menu, click **Preferences**.
- 2 Click the box to run programs in Mac Classic during Explore Mode.
- 3 Click **OK**.

## Create the Virtual Disk

Starting the Create and View Virtual Disk function is the first step to rebuilding your disk.

### To create the virtual disk

- 1 In the Volume Recover main window, select the disk to recover.
- 2 Click **Create & View Virtual Disk**.

After files are located, your computer screen will appear in Explore Mode and display your original disk and the Virtual Disk.

Explore Mode means that you are viewing an advance look of the rebuilt disk (the Virtual Disk) and have not yet decided to rebuild your directory.

In Explore Mode, both the Virtual Disk and the original disk are read-only and your screen background will have a different pattern to it. No edits or changes can be performed on files from these two disks at this time.



You can now compare the original disk and the Virtual Disk in Explore Mode unless the original disk is so badly damaged that it cannot be mounted.

- 3 If there are any files on the Virtual Disk that you wish to back up immediately, drag the icon of the desired file from the Virtual Disk onto another disk, such as an external drive. These files will now be backed up on the disk to which you have copied them.
- 4 If the Rebuild Options screen does not display automatically, click **Continue**.



Rebuilding your disk is permanent. If you did not find the files that you were looking for, or if you have fewer files on your Virtual Disk than on your original disk, do not rebuild your disk at this time. Instead, click **Search More** to continue searching for files.

**Recover damaged disks with Volume Recover**

- 5 In the Rebuild Options window, select the action that you want to take. Your options are:

|                   |   |
|-------------------|---|
| Rebuild Disk      | If the Virtual Disk is acceptable, choose this option to rebuild your original disk to the state of the Virtual Disk.   |
| Search More       | If the Virtual Disk is incomplete, choose this option to search for more files. This process may take a long time. A message will display asking if you wish to search the entire device. To continue searching, click Proceed. |
| Quit & Don't Save | To return to the main Volume Recover window, choose this option. The Virtual Disk is unmounted and will not be saved. At this point, you will exit Explore Mode.  |

**Find deleted files using the Create and View Virtual Disk function**

Create and View Virtual Disk also lets you search for deleted files. However, only a small percentage of deleted files are located using this method. This option may also result in unwanted files and documents being restored.

**To set the Deleted Files preference**

- 1 Be sure that you have exited Explore Mode.
- 2 On the Volume Recover menu, select **Preferences**.
- 3 Check the box to look for deleted files.
- 4 Click **OK**.
- 5 Click **Create and View Virtual Disk**.

**Prepare the rebuilt disk for use**

The rebuilt disk replaces the original disk immediately.

### To prepare the recovered disk for use

- 1 As a precaution, copy any critical files from your computer's rebuilt disk to another disk.
- 2 Run Norton Disk Doctor to examine and further repair the disk with the newly restored directory information.

See "Examine disks" on page 51.

## Perform a FileSaver Search

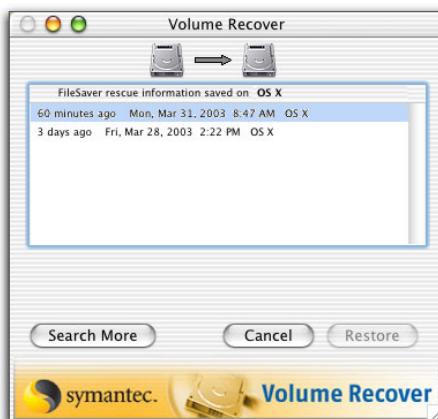
Before proceeding with FileSaver Search, be aware of the following:

- Any files that were created after the most recent FileSaver information file are not recovered.
  - Any file that was modified or deleted after the FileSaver information files were last saved is recovered but might be damaged.
  - You cannot undo the Volume Recover process.
- !** If you do not have FileSaver turned on, or if Norton Utilities was not installed when your disk became damaged, do not use this feature. Instead, use the Create and View Virtual Disk function.

When you have located the disk that you want to recover, search for FileSaver information.

### To search for FileSaver information

- 1 In the Volume Recover main window, select the disk to recover.
  - 2 Click **FileSaver Search**.
- Volume Recover searches your drive for information stored by FileSaver to recover your disk.

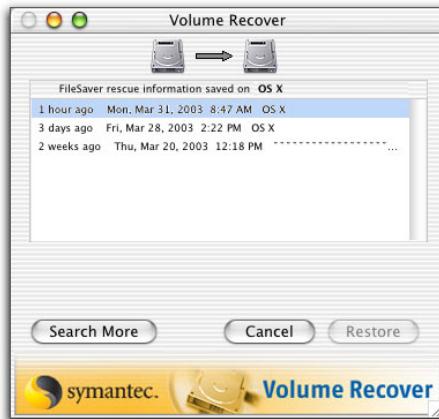


## If an expected FileSaver file isn't found

If the located FileSaver information is not for the volume that you want to recover, or if you think there is more recent FileSaver information for the volume, Volume Recover can search for more FileSaver files.

### To search for more files

- 1 In the Volume Recover search results window, click **Search More**. If FileSaver information is still not found, Volume Recover scans the partition.



- 2 To scan the entire physical device, click **Search More** again.

See "[Use the Create and View Virtual Disk function](#)" on page 56.

See "[How Norton FileSaver protects your disks and files](#)" on page 41.

If Volume Recover still can't find FileSaver information, or the FileSaver information is more than one week old, try using the Create and View Virtual Disk function.

If no suitable FileSaver files are found, be sure that for the future Norton FileSaver is configured to protect your files and volumes.

## Restore a disk using FileSaver information

After starting Volume Recover and locating a FileSaver file using FileSaver Search, complete the restoration of your disk. Always select the most recent FileSaver file, unless you know that your disk was damaged before the date and time that the file was saved.

### To restore a disk using FileSaver information

- 1 Select a FileSaver file.
- 2 Click **Restore**.  
Volume Recover informs you that the disk's directory information will be replaced by the FileSaver information.
- 3 Click **Proceed** to recover the FileSaver information to the selected volume.

### Prepare the recovered disk for use

If recovery with the FileSaver file is successful, you must restart your computer to complete the recovery.

### To prepare the recovered disk for use

- 1 Restart your computer.  
After you restart, the restored FileSaver information takes the place of the current disk information.
- 2 As a precaution, copy any critical files from your computer's restored disk to another disk.
- 3 Run Norton Disk Doctor to examine and further repair the disk with the newly restored directory and partition information.

See "Examine disks" on page 51.

### If recovery is not successful

See "Recover files with UnErase" on page 63.

If Volume Recover is unable to restore your disk, try the UnErase feature to recover files.

## Get information about disks, folders, and files

The Get Info feature lets you view information about disks, folders, and files. If a disk or file doesn't have an icon or name, use Get Info to identify it. In a Get Info window, you can change the Finder flag, *File type* and Creator codes, and the name of a selected item.

## View file, folder, and disk information

The Get Info feature lets you view and change Finder flags, File type and creator information for disks, applications, files, and folders. Changes that are made in the Get Info windows are permanent and will remain until you or the System changes them.



Editing Finder flags, Creator, and Type characteristics requires technical expertise. Do not change them unless it is absolutely necessary.

### To view information for a disk, file, or folder

- 1 Open Norton Disk Doctor, Volume Recover, or Norton Disk Editor X.
- 2 Do one of the following:
  - On the File menu, click **Get Info For** and select the disk for which you want information.
  - Click **Get Info**.
- 3 Change the desired options, if needed.
- 4 Click the close box.

# Recovering missing or erased files

# 5

If you have accidentally deleted files, if files are missing, or if Norton Disk Doctor reports that a disk is irreparably damaged, use UnErase to recover the files or data and move them to a safe location.

## Recover files with UnErase

UnErase provides powerful search and data-recovery capabilities. The basic Quick Search operation is simple, almost completely automatic, and uses the method most likely to succeed.

### UnErase search methods

The process that UnErase uses is as follows:

- If FileSaver information is found on the disk, UnErase tries a combination of a FileSaver Search and the Create and View Virtual Disk function.
- If no FileSaver information is found, UnErase first tries a Quick Search.
- If this first Quick Search is unsuccessful, start a Customized Search and choose Catalog Search, File Pattern Search, or Text Search. See “[Perform Catalog, File Type, and Text searches](#)” on page 69.

### Before using UnErase

See “[When to use Norton Disk Doctor](#)” on page 47.

If files or folders have unexpectedly disappeared, there might be a problem with your directory. Run Norton Disk Doctor before searching with UnErase. Norton Disk Doctor might be able to repair a damaged directory.

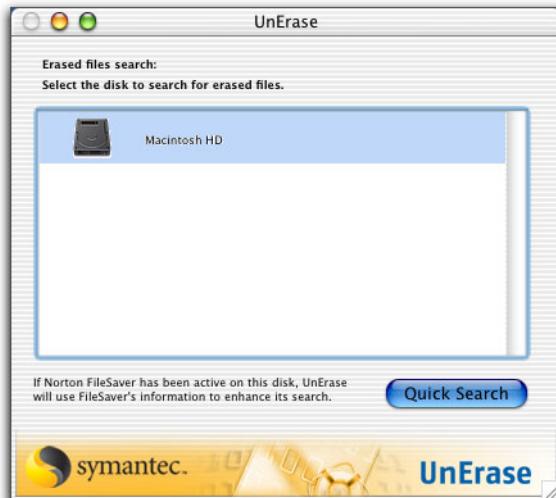
## Open UnErase

Before using UnErase, double-check the Trash for the missing files or folders.

## Open UnErase

When you open UnErase, disks appear in the UnErase list.

There are contextual menu and drag and drop shortcuts that you can use with UnErase.



### To open UnErase

- ❖ In the Norton Utilities main window, click **UnErase**.

## Use Quick Search

See "[Sort or filter UnErase search results](#)" on page 65.

After you have started UnErase, select the disk on which the missing file was located and perform a Quick Search.

### To perform a Quick Search

- 1 In the UnErase window, select the disk that contains the erased file.

- 2 Click **Quick Search**.

UnErase searches the selected disk for erased files and displays the results in the UnErase Search window.

## If the file isn't found by Quick Search

If a missing file doesn't appear after a Quick Search, it might be on a different disk or need a more customized search.

Use the following options to continue searching:

- If the file might be on another disk, select that disk and perform another Quick Search.
- If you know that the missing file was on the disk that you searched, try a Customized Search. See “[Perform Catalog, File Type, and Text searches](#)” on page 69.

## Manage UnErase search results

After performing a Quick Search, UnErase displays the results in the UnErase Search results window, along with an estimate of the file’s recoverability.



If it is obtainable, the selected file’s last location appears in the bottom pane of the UnErase Search window.

## Sort or filter UnErase search results

When UnErase searches for erased files, it might display many files and folders that you don’t want to see. You can sort the files in ascending or

**Open UnErase**

descending order by column. You can also apply a filter to hide unwanted files and folders in the display. If the recoverability estimate is low, you can select a filter to limit the time that UnErase spends searching for the file. You can also examine a file's contents to determine if it is worth recovering.

**To sort the found files**

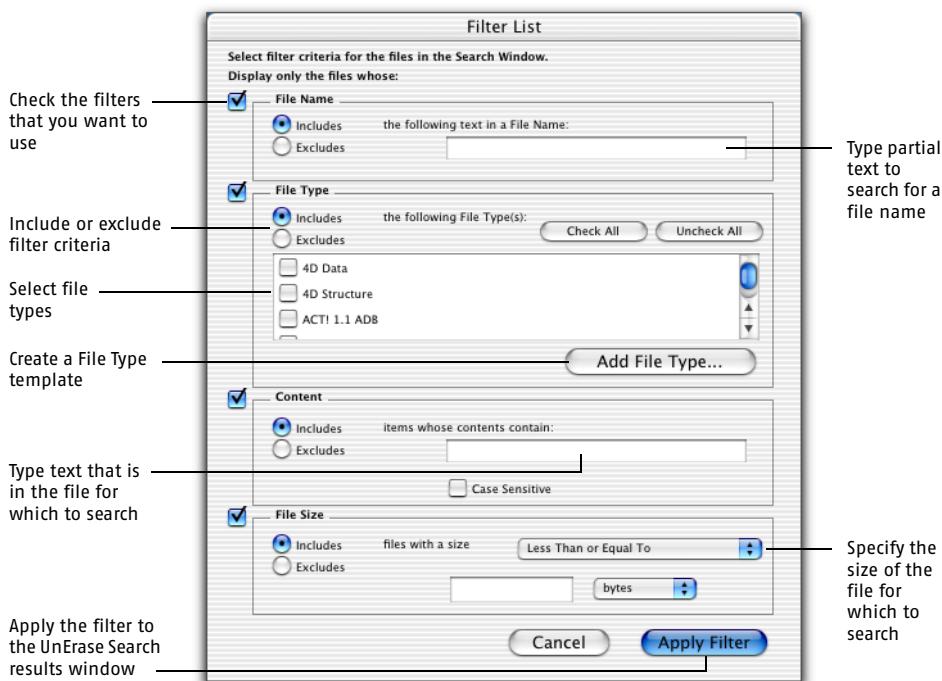
- ❖ In the UnErase Search results window, click any column title. The highlighted column title indicates the current sort order.

Use a filter to hide unwanted file and folder types in the UnErase Search results list.

**To filter the list of found files**

- 1 In the UnErase Search window, click **Filter List**.

This option is available when Hide Unrecoverable Files is unchecked.



- 2 In the Filter List dialog box, check the filters that you want to use.
- 3 Click **Apply Filter**.

When you no longer need a filter, remove it from the UnErase search.

#### To remove a filter

- ❖ In the UnErase Search window, click **Remove Filter**.

#### To change an active filter

- 1 In the UnErase Search window, click **Filter List**.
- 2 Make changes to the filter criteria.
- 3 Click **Apply Filter**.

## View a file's information or contents

In the UnErase Search results window, you can view more information about a file, or its contents.

## Recover a file or folder

When you have identified a file to recover, select a destination for the recovered file. Although you can recover an erased file to the same disk, it is safer to specify a Zip disk or other removable media, a network disk, or another hard disk if you have one. When you recover to the same disk, you jeopardize your chances of recovering other erased files.

#### To recover a file or folder

- 1 In the UnErase Search results list, select one or more items.
- 2 Click **Recover**.
- 3 Select a disk on which to save the recovered files.  
If the destination disk doesn't have enough space, UnErase splits the file.
- 4 Click **Recover**.  
UnErase recovers the files and displays a status message.

When UnErase recovers a file using a Quick Search or Catalog Search, it creates a folder with the same hierarchy and name as the last folder in which the file resided. This folder is placed within a folder called Recovered Files.

If you have previously dragged a file to the Trash and then emptied the Trash, UnErase attempts to determine the folder from which the file was originally taken. However, if necessary, UnErase creates a .Trashes folder inside of the Recovered Files folder. Do not confuse this folder with the original Trash.

## Restore recovered files

Some files need additional treatment before they are fully restored. You might need to join a file's data and resource forks on some file types or rejoin segments of a large file that was split into segments during recovery.



Recovered files will have your permissions rather than the file's original permissions. These permissions allow you to examine the file. You may want to change the permissions after recovery.

### Join data and resource forks

When you recover an erased file that has a resource fork and a data fork, you might have to rejoin the two parts to restore the file to its original condition. In a File Type search, UnErase lists each fork as a separate file.

#### To restore the order in which files were found

- ❖ In the search results list, press **Option** and click any column heading. This removes any sorting from the list.

Once you have located matching data and resource forks, you can join them.

#### To join previously recovered resource and data forks

- 1 Open UnErase.
- 2 On the Tools menu, click **Join Forks**.
- 3 In the Join Forks dialog box, click the first **Select File** button.
- 4 Locate the Recovered Files folder, then select the data fork.
- 5 Click **Open**.  
The file name appears next to the first Select File button.
- 6 Click the second **Select File** button.
- 7 Locate the Recovered Files folder, then select the resource fork.
- 8 Click **Open**.  
The file name appears next to the second Select File button.
- 9 Click the third **Select File** button.

- 10 Select a location, then type a name for the joined file.
- 11 Click **Save**.
- 12 Click **Join**.  
UnErase displays the status of the joined file.  
You should now be able to open the file using the program that created it.

#### If you are unable to join forks

If you are not successful in joining resource and data forks, save the data from the data fork by copying it to another file.

## Perform customized searches

A customized search might find erased files that are not found through a Quick Search. Available options in customized searches include Catalog, File Type, and Text searches.

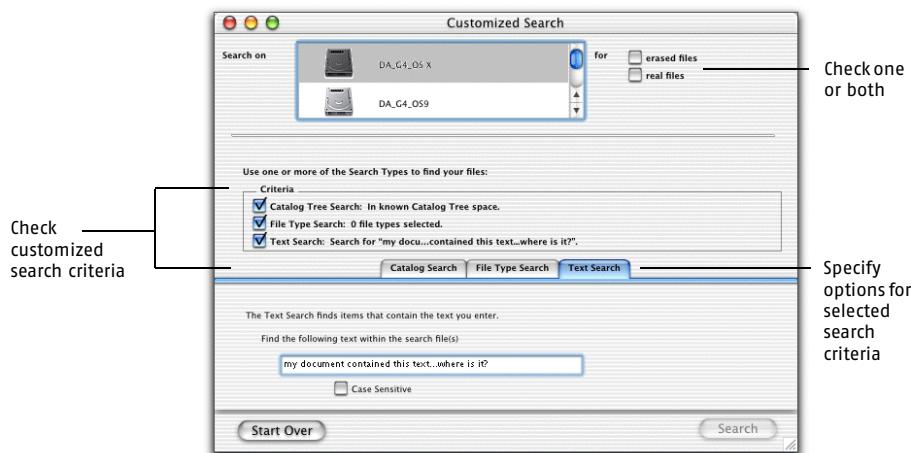
If the first customized search method is unsuccessful, try another, or combine them.

## Perform Catalog, File Type, and Text searches

If using the Catalog Search function is unsuccessful but you know which program was used to create a lost file, try a File Type Search, or use a Text Search to search for specific text within a file.

**Perform customized searches****To perform a customized search**

- 1 Do one of the following:
  - In the Search Results window, click **Customized Search**.
  - On the Tools menu, click **Customized Search**.



- 2 Select the disk on which to search.
- 3 Check the types of files to include. Your options are:

|              |  |
|--------------|--|
| Erased files | UnErase searches for files in the unused and erased files area of your disk. If your disk is healthy, this is the best choice.   |
| Real files   | UnErase searches currently used areas of your hard disk. If your disk directory information has been damaged, check both real files and erased files for best results. |

- 4 Under Criteria, check the search options for this search.
- 5 On the search tabs, specify the details for your customized search.
- 6 Click **Search**.

# Enhancing performance and security

# 6

Norton Utilities includes productivity-enhancing features that improve performance, test your computer's performance against standardized benchmarks, and assist with security and confidentiality.

## Improve a computer's performance

Speed Disk is a powerful optimization utility that defragments files and free space and organizes files on the disk to provide faster performance. It lets you customize file arrangement to match your computing activity.

Performing a complete optimization of your disk is the only way to provide defragmentation of the directory, improving both the performance and security of your disk.

## About optimization and file fragmentation

The terms *defragmentation* and optimization are often used interchangeably, but they are not the same.

- Defragmentation is the process of arranging the way that files are organized on a disk so that the data that comprises each file is stored in adjacent blocks.
- Optimization is the process of arranging the way that files are organized on a disk so that frequently used files and file types can be accessed easily.

## How Speed Disk optimizes

Speed Disk optimizes your disk by placing files on the disk according to file type. For example, system files are placed together where they can be accessed efficiently. Desktop files, documents, and other frequently used files are placed adjacent to free space where they have room to grow with minimal fragmentation.

## Open Speed Disk

If you want to optimize your startup disk, you must start from the CD or another disk.

### To open Speed Disk

- 1 In the Norton Utilities main window, click **Speed Disk**.
- 2 In the dialog box that appears, read the cautionary message.
- 3 To prevent the dialog box from appearing again, check **Don't show this alert again**.  
 If you have booted from the CD, it is not possible to prevent the dialog box from appearing.
- 4 Click **OK**.  
When you open Speed Disk, the available disks appear in the window. On the selected disk's map, used areas appear in black and free areas in white.

## Optimize a disk

When you have identified the disk that you want to optimize, you can proceed. To optimize your startup disk, you must be restarted from the CD.

### To optimize a disk

- 1 In the Speed Disk window, select a disk.
- 2 To analyze the disk before performing the optimization, click **Check Disk**.

- 3 Click **Optimize**.  
Speed Disk starts optimizing the selected disk.
- 4 If bad blocks are found, run Norton Disk Doctor Media Check to correct them or mark them to prevent further use.  
Marking bad blocks does not eliminate them from the disk. To ensure future data integrity, back up disks containing bad blocks and reformat them using the disk's formatting software.

When optimization is complete, Speed Disk has defragmented files and arranged file types for optimal use.

## If you want to optimize a startup disk

See ["Start from the CD"](#) on page 13. To optimize your startup disk, restart your computer from another disk or from the CD.

## Defragment files

The optimization process can't work with files that are open or in use, locked disks, or unmountable partitions. Your startup disk always has open files, so you must start from the CD or another designated disk to optimize your startup disk. You can still defragment files on disks that have files in use.

### To view and defragment selected files

- 1 In the Speed Disk window, select a disk.
- 2 On the Explore menu, click **Show Fragmented Files**.  
The Fragmented Files dialog box lists all of the fragmented files, their sizes, and the number of fragments.  
Some files can't be defragmented. The reasons for their unavailability are listed in the Note column.
- 3 To sort the list, click any of the column headings. To reverse the order of the sort, click the triangular icon to the right of the Note column heading.
- 4 In the Fragmented File dialog box, do one of the following:
  - Select one or more files to defragment.
  - To select all files, press **Command-A**.
- 5 Click **Defragment Selected Files**.

## Schedule defragmentation of files

See "[Schedule disk defragmentation](#)" on page 88.

Use the Norton Scheduler to schedule your computer for file defragmentation during times that are most convenient for you.

It is recommended that you completely optimize your disk with Speed Disk before performing the defragmentation process. Otherwise, defragmentation will take longer to complete.

See "[Using the FileSaver window](#)" on page 42.

Scheduled defragmentation can take place only when the disk is checked in the FileSaver window. However, you can defragment files with Speed Disk at any time, regardless of settings in the FileSaver window.

## Set Speed Disk preferences

You can customize the optimization process. You can specify the degree of file and data verification that you want Speed Disk to use during optimization, and how you want Speed Disk to notify you when it is finished optimizing. Speed Disk can launch Wipe Info to remove residual data from free space.

### To set Speed Disk preferences

- 1 Open Speed Disk.
- 2 On the Options menu, check the options that you want Speed Disk to perform during optimization. Repeat the process to choose another option.  
Your selections take effect immediately.

## Customize optimization

See "[Set Speed Disk preferences](#)" on page 74.

Speed Disk comes with predefined profiles that define how file types are arranged on a disk during optimization. For example, if you work with a lot of multimedia files, you can select the Multimedia profile, and Speed Disk optimizes your disk according to the typical activities of multimedia file users. If no built-in profile meets your needs, you can design your own with the Speed Disk Profile Editor.

## Select a Speed Disk profile

Speed Disk normally runs with the General Use profile. This setting usually provides the best performance, and doesn't need to be changed unless your files require special consideration. Other built-in profiles are designed for CD mastering, heavy multimedia use, and consolidating free space.

### To select a Speed Disk profile

- 1 Open Speed Disk.
- 2 On the Options menu, select a profile from the Optimize For submenu.

### To search for other Speed Disk Profile Editor documents

- 1 Open Speed Disk.
- 2 On the Options menu, on the Optimize For submenu, click **Add Profiles**.
- 3 Search for and select a folder that contains Speed Disk Profile Editor documents.
- 4 Click **Choose**.

## Remove data permanently

Wipe Info is used to delete data that you do not want anyone to ever see. It will permanently remove any evidence of the data from your computer.

### When to use Wipe Info

You can use Wipe Info to permanently delete information, to clean unused disk space, and to ensure that no sensitive information that was inside of invisible, temporary files still exists in unallocated fragments.

### How Wipe Info works

When you empty the Trash or erase a disk, only the bookkeeping information about the disk is modified. The data in erased files remains on the disk, even though the file names no longer appear in any folder, until the space is needed to store other files. This poses a security risk for sensitive and confidential documents.

- ! Wipe Info permanently removes the file data along with the entire allocation block where the data is stored.

## Open Wipe Info

Open Wipe Info when you have restarted from the CD.

The Wipe Info main window contains three disk wiping operations: Wipe File/Folder, Wipe Disk, and Wipe Unused Space. A fourth option, Wipe

Entire Device, is available from the Wipe menu. There are contextual menus and drag-and-drop shortcuts that you can use with Wipe Info.

### To open Wipe Info

- 1 Open Norton Utilities.
- 2 On the Norton Launcher, click **Wipe Info**.



## Wipe items on your disks

Wipe Info can eradicate a single file or a folder that is filled with files.

### To wipe a file or folder

- 1 In the Wipe Info main window, click **Wipe File/Folder**.
- 2 Select a file or folder to delete.
- 3 Click **Wipe**.  
You are asked to confirm the deletion.
- 4 Click **Wipe**.  
Wipe Info erases the selected file or folder permanently.

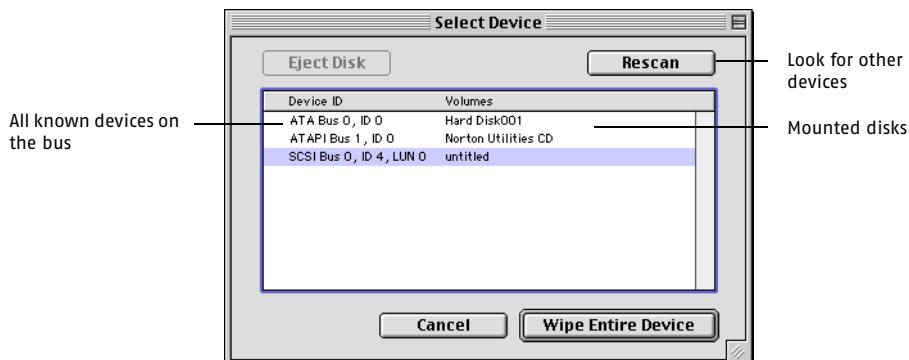
### To wipe an entire disk

- 1 In the Wipe Info main window, click **Wipe Disk**.
- 2 In the drive selection dialog box, select a disk drive.
- 3 Click **Wipe Disk**.
- 4 When prompted, type a new name for the disk.
- 5 Click **Wipe**.  
Wipe Info erases the entire selected disk permanently.

You can wipe any USB, SCSI, FireWire, or IDE device, such as a Zip drive, as well as internal or external hard disks. If the device is large, the wiping process might require a significant amount of time to complete.

### To wipe a device

- 1 Open Wipe Info.
- 2 On the Wipe menu, click **Wipe Entire Device**.  
The Select Device window lists available devices.



- 3 If the device that you want to wipe does not appear, recheck all cables and power to the device, and click **Rescan**.
- 4 Select a device in the list.
- 5 Click **Wipe Entire Device**.
- 6 When prompted, click **Wipe**.

Wipe Info erases the selected device.



After erasing the device, you will need to reformat it with a compatible formatting software program such as the Apple Disk Utility, FWB Hard Disk Toolkit or a similar disk tool that is designed to work with the device make and model.

### To wipe unused disk space

- 1 In the Wipe Info main window, click **Wipe Unused Space**.
- 2 Select the device whose unused space you want to delete.
- 3 In the Selection dialog box, click **Wipe Unused Space**.
- 4 When prompted, click **Wipe**.



# Keeping Norton Utilities up-to-date

7

When you first install your Symantec product and run LiveUpdate, you have the most current versions of the product and any protection-related files, such as the inappropriate Web site list for Norton Internet Security or the *virus definitions* list for Norton AntiVirus.

At any time, new *threats* can be introduced. Also, some operating system updates may necessitate changes to a program. When these events occur, Symantec provides new files to address these issues. You can get these new files by using LiveUpdate.

Using your existing Internet connection, LiveUpdate connects to the Symantec LiveUpdate server, checks for available updates, then *downloads* and installs them.

## About program updates

Program updates are minor improvements to your installed product, usually available for *download* from a Web site. These differ from product upgrades, which are newer versions of entire products. Program updates that replace sections of existing software are called patches. Patches are usually created to ensure the compatibility of a program with new versions of operating systems or hardware, adjust a performance issue, or fix bugs.

LiveUpdate automates the process of downloading and installing program updates. It locates and downloads files from an Internet site, then installs them, and deletes the leftover files from your computer.

## When you should update

See "[Schedule future updates](#)" on page 84.

During installation of your software, you have the option to run LiveUpdate. You should do so to ensure that you have the most up-to-date protection files. After installation, if you have Norton AntiVirus, Norton Personal Firewall, Norton Internet Security, or Norton SystemWorks installed, update at least once a month to ensure that you have the latest [virus definitions](#) and firewall protection.

## Before updating

In some cases there are preparations you must make before running LiveUpdate. For example, if you use America Online (AOL) as your [Internet service provider \(ISP\)](#), you must log on to AOL before you use LiveUpdate.

### If you use America Online to connect

If you use America Online (AOL) as your [Internet service provider \(ISP\)](#), you need to log on to AOL before you use LiveUpdate.

#### To use LiveUpdate with AOL

- 1 Log on to AOL.
- 2 On the AOL Welcome page, click the AOL Internet browser.
- 3 Open LiveUpdate.
- 4 Follow the instructions in "[Update procedures](#)" on page 82.
- 5 When the LiveUpdate session is complete, close your AOL browser. If your LiveUpdate session requires that you restart your computer, disconnect from AOL before restarting.

### If you update on an internal network

If you run LiveUpdate on a Macintosh that is connected to a network that is within a company firewall, your network administrator might set up an internal LiveUpdate server on your network. Once your administrator has configured it, LiveUpdate should find this location automatically.

If you have trouble connecting to an internal LiveUpdate server, contact your network administrator.

## If you can't use LiveUpdate

When new updates become available, Symantec posts them on the Symantec Web site. If you can't run LiveUpdate, you can obtain new update files from the Symantec Web site.



Your subscription must be current to obtain new protection updates from the Symantec Web site.

### To obtain product updates from the Symantec Web site

- 1** Open your Internet browser and go to the following site:  
[securityresponse.symantec.com/downloads/](http://securityresponse.symantec.com/downloads/)
- 2** On the downloads page, in the product updates list, select the product for which you want an update.
- 3** On the support page, select the version of the product.
- 4** Click **continue**.
- 5** On the product page, select the file to download.  
Information about the update is included with the download.

## Update procedures

See "Schedule future updates" on page 84.

You can have LiveUpdate look for all updates at once, or select individual items to update. You can also schedule a future LiveUpdate session.



### Update everything now

Updating all available files is the fastest method to ensure the latest protection for all your Symantec products.

#### To update everything now

- 1 On the Norton Launcher menu bar, click **LiveUpdate**.
- 2 Click **Update Everything Now**.  
A status dialog box keeps you informed of the file transfer process.

### Customize a LiveUpdate session

If you want to update only one or two items, you can select them and omit items that you don't want to update.

### To customize a LiveUpdate session

- 1 In the LiveUpdate window, click **Customize this Update Session**. LiveUpdate presents a list of available updates. By default, all are checked for inclusion in this update session. If your files are already up-to-date, no items are available for selection.
- 2 Uncheck the items that you don't want to update.
- 3 Click **Update**. The file transfer takes a few minutes. When it is complete, the LiveUpdate summary window appears.

See "View the LiveUpdate Summary" on page 83.

## After updating

When a LiveUpdate session is complete, the LiveUpdate Summary window displays a list of what was updated, along with brief notes.

### View the LiveUpdate Summary

The LiveUpdate Summary dialog box displays a summary of the activity and a list of products updated in this session.

Some updates require that you restart your computer. When this recommendation appears in the summary description, the **Restart** button is available.

#### To restart after a LiveUpdate session

- ❖ In the LiveUpdate Summary window, click **Restart**.

### Empty the Trash after a LiveUpdate session

After you update program files, LiveUpdate moves the older, discarded files to the Trash. If you haven't already restarted after updating, you might get a message that these files are in use. After you restart your computer, you can empty the Trash.

### Check product version numbers and dates

The LiveUpdate window displays the version numbers and dates of the most recent updates.

You can also check the version numbers and dates in the product's About box, accessible from the product menu, to verify that you have the latest version.

#### To view an application's About box

- 1 Open your product.
- 2 On the product menu, click **About <product name>**.  
The About box lists the version number and copyright dates.
- 3 When you've finished viewing the About box, close it.

## Schedule future updates

- ! The user who scheduled the event must be logged on for the scheduled event to occur. If this condition is not true, the event occurs the next time the correct user is logged on.

You can set up events to run at a scheduled time, without your participation. If your Macintosh is turned off during the time an event should take place, the event occurs the next time that you start your Macintosh. Before scheduling an update, test it once manually. See “[Update everything now](#)” on page 82, and “[Customize a LiveUpdate session](#)” on page 82.

For instructions on scheduling future updates, see “[Schedule LiveUpdate events](#)” on page 86.

# Scheduling future events

# 8

Use Norton Scheduler to ensure that key tasks are performed regularly to keep your computer and data protected.

## About Norton Scheduler

The tasks that are available in Norton Scheduler depend on what products are installed.

If your Macintosh is turned off during the time that an event should take place, the event occurs the next time that you start your Macintosh.

## Open Norton Scheduler

You can open Norton Scheduler from your open program.

### To open Norton Scheduler from LiveUpdate

- 1 Open LiveUpdate.
- 2 In the LiveUpdate window, click **Norton Scheduler**.

### To open Norton Scheduler from the Norton Launcher

- 1 Open Norton Launcher.
- 2 In the Norton Launcher window, click **Norton Scheduler**.

### To open Norton Scheduler from Norton FileSaver

- 1 Open Norton FileSaver.
- 2 In the Norton FileSaver window, click **Norton Scheduler**.

See "Update procedures" on page 82.

See "How to start and exit Norton Utilities" on page 37.

**Schedule LiveUpdate events****To open Norton Scheduler from Speed Disk**

See “[Open Speed Disk](#)” on page 72.

- 1** Open Speed Disk.
- 2** On the Utilities menu, click **Norton Scheduler**.

## Schedule LiveUpdate events

In Norton Scheduler, LiveUpdate events check for updates to your installed products. If you have Norton AntiVirus installed, a monthly *virus definitions* update is also scheduled.

**To add scheduled LiveUpdate events**

See “[Open Norton Scheduler](#)” on page 85.

- 1** Open Norton Scheduler.
- 2** In the Norton Scheduler window, click **New**.
- 3** Click **Product Update**.
- 4** Type a descriptive name for the LiveUpdate task, for example, Update Fridays.
- 5** In the Choose a product to update list, select the item to update. Your options are:

|                   |   |
|-------------------|---|
| All Products      | Updates all installed products.   |
| Virus Definitions | Updates virus definitions.  |
| LiveUpdate        | Updates LiveUpdate program files.   |
| <Product Name>    | Updates a product that you select. The names of installed Symantec products appear in the list. |

- 6** In the Set a Frequency list, specify when the update should occur. Your options are:

|          |  |
|----------|--|
| Monthly  | Runs the event monthly on the indicated date and time. You can select a date from the first of the month to the twenty-eighth. |
| Weekly   | Updates once a week on the specified day and at the specified time.  |
| Daily    | Runs the event daily at the indicated time.  |
| Annually | Runs the event each year on the indicated day and time. You can schedule the event up to one year in advance.                  |

See "Set a start time" on page 87.

- 7 If you choose a frequency other than Daily, specify the date or day of the week that the update should occur.
- 8 Set a start time for the event.
- 9 Click **Save**.

## Set a start time

You can set the exact time at which you want a scheduled event to start.

### To set a start time

- 1 In the task window, in the Set the time box, do one of the following:
  - Type the exact time that you want in the hour and minute boxes.
  - Select the hour or minute box, then click the Up Arrow or Down Arrow to change the time that is displayed.
- 2 If your computer is set to display a 12-hour clock, an AM/PM indicator appears next to the time. Click the indicator to toggle the setting.
- 3 When you are finished, click **Save**.

## Schedule FileSaver snapshots

See "FileSaver snapshots schedule" on page 42.

### To add scheduled FileSaver snapshots

- 1 Open Norton Scheduler.
- 2 In the Norton Scheduler window, click **New**.
- 3 Under Choose a task for scheduling, click **FileSaver Snapshot**.
- 4 In the Add FileSaver Snapshot Task window, type a descriptive name for the task, for example, Update Fridays.
- 5 In the Set a Frequency list, specify when the task should occur. Your options are:

|          |  |
|----------|--|
| Monthly  | Runs the event monthly on the indicated date and time. You can select a date from the first of the month to the twenty-eighth. |
| Weekly   | Runs once a week on the specified day and at the specified time.   |
| Daily    | Runs the event daily at the indicated time.  |
| Annually | Runs the event each year on the indicated day and time. You can schedule the event up to one year in advance.                  |

- 6 If you choose a frequency other than Daily, specify the date or day of the week that the task should occur.
- 7 Set the time of day that the event should occur.
- 8 Click **Save**.

## Schedule disk defragmentation

See "Schedule defragmentation of files" on page 74.

You can schedule a task for Speed Disk to defragment the disk or disks you have selected in FileSaver preferences. The disk defragmentation schedule is preset to run at noon.



Use Speed Disk to optimize any disk before you schedule it for defragmentation. See "Open Speed Disk" on page 72.

### To add scheduled defragmentation

- 1 Open Norton Scheduler.
- 2 In the Norton Scheduler window, click **New**.
- 3 Click **Defragment Files**.
- 4 In the task window, type a descriptive name for the task, for example, Defrag Fridays.
- 5 In the Set a Frequency list, specify when the update should occur. Your options are:

|          |  |
|----------|--|
| Monthly  | Runs the event monthly on the indicated date and time. You can select a date from the first of the month to the twenty-eighth. |
| Weekly   | Updates once a week on the specified day and at the specified time.  |
| Daily    | Runs the event daily at the indicated time.  |
| Annually | Runs the event each year on the indicated day and time. You can schedule the event up to one year in advance.                  |

- 6 If you choose a frequency other than Daily, specify the date or day of the week that the task should occur.
- 7 Set the time of day that the event should occur.
- 8 Click **Save**.

# Manage scheduled events

You can edit, delete, disable, and reset scheduled events.

## Edit scheduled events

You can make changes to the events that you schedule.

### To edit a scheduled event

- 1 Open Norton Scheduler.
- 2 In the Scheduled Events list, select the scheduled event that you want to change.
- 3 Click **Edit**.
- 4 Make your changes.  
For a description of the scheduling options, see “[Schedule LiveUpdate events](#)” on page 86.
- 5 To change the event name, type a new name in the name field.
- 6 Click **Save**.

## Delete scheduled events

You can delete scheduled events that you no longer want.

### To delete a scheduled event

- 1 Open Norton Scheduler.
- 2 In the Scheduled Events list, select the scheduled event that you want to delete.
- 3 Click **Delete**.
- 4 In the verification box that appears, click **Delete** to verify that you want to delete the event.

## Disable scheduled events

You can disable scheduled events without deleting them in case you want to enable them later.

### To disable a scheduled event

- 1 In the Scheduled Events list, under On, uncheck the event that you want to disable.
- 2 To enable the event, check it again.

## Reset scheduled tasks

You can reset all scheduled tasks to their original installed settings.

| Product                  | Installed settings   |
|--------------------------|--|
| Norton Personal Firewall | None.  |
| Norton AntiVirus         | Monthly LiveUpdate task to check for new virus definitions. Set to run on the first of each month.   |
| Norton Internet Security | Monthly LiveUpdate task to check for new virus definitions. Set to run on the first of each month.   |
| Norton Utilities         | Daily FileSaver snapshot to update your disk directory information. Set to run at noon.<br>Daily Speed Disk defragmentation. Set to run at midnight.   |
| Norton SystemWorks       | Monthly LiveUpdate task to check for new virus definitions. Set to run on the first of each month.<br>Daily Speed Disk defragmentation. Set to run at midnight.<br>Daily FileSaver snapshot to update your disk directory information. Set to run at noon. |

### To reset scheduled tasks

- 1 On the Norton Scheduler menu, click **Reset Scheduled Tasks**.
- 2 In the verification window, click **Reset**.

# Troubleshooting computer problems

# 9

Use these troubleshooting suggestions to help solve your problem after you have tried the tools in Norton Utilities.

## If Norton Utilities cannot solve your problems

If Norton Disk Doctor, Volume Recover, and UnErase cannot solve your problems, try the following suggestions.

| Suggestion   | For more information  |
|--|---|
| Check all cables for loose connections.  | See " <a href="#">Check all cables</a> " on page 92.                                  |
| Reset the PRAM by restarting and pressing Command-Option-P-R.  | See " <a href="#">Zap the PRAM (reset Parameter RAM)</a> " on page 96.                |
| Disconnect all external devices.   | See " <a href="#">Have you added anything new lately?</a> " on page 93.               |
| Update your device drivers with the latest formatting software. See the device manufacturer's documentation.                     | See " <a href="#">Replace damaged System files</a> " on page 96.                      |
| Your device might need an installed extension, or Norton Disk Doctor, UnErase, or Volume Recover might not recognize the device. | See " <a href="#">If you don't see the disk that you're looking for</a> " on page 56. |

## Prepare your computer

Often, problems are easier to find and fix if you can first isolate the problem. Disconnect all external devices other than the one that you are examining. This saves time and prevents accidents from happening to trouble-free equipment.

- ! When you are troubleshooting, use an Apple keyboard and standard Apple mouse. Third-party input devices sometimes use custom drivers that are unavailable on the CD.

## Check all cables

Your Macintosh or the hard disk might not be getting power, or they may not be communicating with each other properly due to a faulty cable connection.

Do the following to check your cables:

- Start with the computer turned off. While it is turned off, check all of its power cords, peripheral cables, and connections.
- Make sure that your Macintosh and its peripherals are plugged into a grounded electrical outlet, and that they are connected to each other. If the computer is too close to a wall, the cable connectors might be loose or the cables might be crimped and the connection not properly made.
- If you are using a device that has a cable with the same type of connectors on each end, it might make a difference which end is connected to your Macintosh.
- Do not substitute cables for different types of devices even if they look exactly alike. The wiring inside of the cable might be different.
- If the computer doesn't start, check the power strip or wall outlet with an item that is known to work.
- When you are certain that power is available to all devices and that all connections are snug, turn the computer on. If your computer does not start, you might have a hardware problem. See “[Is it a hardware problem?](#)” on page 93.

# Have you added anything new lately?

The two top reasons for startup disk problems are adding a new external device and installing software that modifies your Mac OS System software.

If your problem occurred right after you added a hard disk or other peripheral device, check for device conflicts.

- ! Sometimes removing certain kernel extensions can cause your Macintosh to freeze during startup. If this occurs, you may need to startup by holding the shift key down, which prevents third party kernel extensions from loading. The order in which you disable third party kernel extensions may also effect computer performance. It might be necessary to remove some kernel extensions and some startup items, and then restart.

## Is it a hardware problem?

If you are having a hard disk problem that Norton Disk Doctor can't fix, you might have a hardware problem. Compared to software problems, hardware failures are relatively uncommon. In the unlikely event that it happens, utility software can't fix it, and you need to see a qualified technician.

Most internal or external hard disks display the following symptoms.

| Type of drive                | Symptom   |
|------------------------------|---|
| Internal and external drives | <p>The access or busy LED might suddenly stop working or flash repeatedly. The sound that the hard disk makes when it spins up and recalibrates might have changed or gone away.</p> <p>Sometimes drives experience a problem known as stiction. This is when the read/write assembly gets stuck to the point that the platter no longer spins. If the drive is external, sometimes a gentle thump can free it long enough for you to perform a backup. This procedure is not recommended nor is it a long-term solution. When you turn off the drive and turn it on again, the problem will probably return.</p> |

| Type of drive  | Symptom   |
|--|---|
| External drives                                      | The power LED or the hard disk indicator light doesn't light up. This can happen when the hard drive's power supply fails. Your data might be intact on the disk. Have a technician investigate.  |
| Floppy disk drives and other removable media devices | Macintosh floppy disk drive heads can become dirty to the point that they no longer recognize an inserted floppy disk. Drive cleaning kits are not a complete solution to this problem. If you experience this problem, ask your technician if your drive can be cleaned. If a floppy disk gets stuck in a drive, take great care in removing it. The read/write head assembly is delicate and most damage that occurs here is not covered by the Apple warranty.<br><br>Other removable media drives might require special cleaning procedures. Refer to your manufacturer's instructions. |

## When disks do not show up in a list

If a disk that you want to recover does not show up in a list while using Norton Utilities, there are a number of things you can do.

- (!) Be careful not to accidentally erase or initialize your disk while attempting to solve this problem.

| Possible Problem  | Action you can take   |
|---|---|
| Information in your computer's memory has interfered with disk recognition. | Restart your computer.  |
| OS X does not recognize disk.   | Try booting into OS 9 on the same computer or a different computer. Double-click the Norton Utilities CD 9 partition of the CD. |

| Possible Problem  | Action you can take  |
|---|--|
| Damage to data structures on the physical disk prevents volumes from being located. | In the case where you have lost access to a single partition on a drive, you can start from the CD and run Volume Recover's FileSaver Search on another partition. This may restore data structures on the physical disk and bring back the missing partition.<br><br>See " <a href="#">Perform a FileSaver Search</a> " on page 59.   |
| Norton Utilities may not be installed correctly.                                    | If you are a data recovery expert, you can run Norton Disk Editor X to open the disk as a physical drive for examination. See the <i>Norton Disk Editor X Reference Guide</i> PDF on the CD.   |
| Cable or port connection is faulty.   | Uninstall the product and reinstall.<br><br>See " <a href="#">If you need to uninstall Norton Utilities</a> " on page 35.  |
| The port may not be supplying adequate power to run the disk.                       | Connect with a different cable and/or connect to different computer. This only applies if the disk that does not display in the list is external.  |
| The internal drive or internal cable is faulty.                                     | Connect to a different computer. Or, use an optional external power supply, if available. This only applies if the disk that does not display in the list is external.   |
| The FireWire bridge or power supply of a drive has failed.                          | Try removing and installing the drive into another computer.<br><br>Check with your FireWire drive's vendor to see if your drive can be repaired with the data intact.<br><br>You may be able to remove the FireWire drive from its case and use it as a regular ATA drive (this may save you costly data recovery charges). Before considering this, check to see if the drive is still under warranty, as in most cases opening the case will void the warranty. |
| Unidentified problem.   | Try using other available tools such as Apple's Disk Utility.  |

If all of these options prove unsuccessful, it's quite possible that your drive is physically, mechanically, or electronically damaged. If you do not have a current backup copy, contact a data recovery service for consultation on what may be done to recover your data.

## Zap the PRAM (reset Parameter RAM)

The PRAM (Parameter RAM) is an area of RAM that is used to store information about your Macintosh. Your Macintosh computer needs part of the information that is stored in the PRAM in order to locate the current startup device.

Because this information is needed each time that you use your Macintosh, it is stored even when your Macintosh is turned off (a battery supplies power to this memory when you shut down your Macintosh). If the information in the PRAM becomes corrupted, you can clear the information and replace it with new information.



If your computer consistently does not retain the current date and time when you turn the computer off, your PRAM battery might need to be replaced.

Some System settings such as disk *cache*, mouse speed, menu blinking, time zone, and others must be reconfigured after you reset the PRAM.

### To reset the PRAM

- 1 Restart your computer while pressing **Command**, **Option**, **P**, and **R**. As the computer begins to restart, you will hear the startup chime repeat. Continue pressing the keys until the chime has sounded three or more times.
- 2 Release the keys and the startup should complete.

## Replace damaged System files

When you replace System files, you first need to perform a clean System install.

### To replace System files

- ❖ Using your Mac OS System CD, perform a clean System install. Consult your Macintosh User's Guide and follow the procedures for performing a clean System install.

## Recover files before sending a disk to a technician

See "Recovering missing or erased files" on page 63.

If you are still unable to start your Macintosh using your startup disk, you might have a hardware problem that only a qualified service technician can fix. It might still be possible to recover files from the volume even though you can't start from it. Before you send the disk to a technician, try using UnErase to recover data.

## Reformat your hard disk

See "Using Norton Disk Editor" on page 97.

A hard disk can accumulate bad or weak sectors, known collectively as bad blocks. When this happens, some sectors can no longer be accessed unless the hard disk is physically reformatted or low-level formatted.

Reformat your hard disk only if you have exhausted all repair options, including a professional data recovery service. Because reformatting the hard disk destroys all existing information that is contained on the disk, recover as much information as possible from your damaged volume before you begin reformatting. If you have a recent backup, recover only the new files and files that have changed since the last backup.

Almost all hard disk formatting applications deal with bad blocks differently. Some remap the blocks using spare or unused sectors during the format process while others require that a specific procedure be run before or after formatting. For instructions on reformatting your hard disk, see the documentation that came with the formatting software.



Do not format your hard disk unless you have a backup of the damaged hard disk or have successfully recovered all of the files using UnErase. See "Recovering missing or erased files" on page 63.

More information is available in the Support section of the Symantec Web site. See "Service and support solutions" on page 107.

## Using Norton Disk Editor

Norton Disk Editor, a powerful program for advanced users, provides an alternative method of recovering data and repairing crashed disks. Use it only if you are unable to fix the problems using Norton Utilities tools.



For more information, see the PDF documentation for Norton Disk Editor on your CD. Use Norton Disk Editor with extreme caution and at your own risk.



# Norton Disk Doctor messages

# 10

Norton Disk Doctor displays status and error messages when it encounters problems or issues during a disk examination. Some messages appear when Norton Disk Doctor is examining a disk in any Mac OS environment, and other messages are specific to Mac OS X file and disk operations.

## About Norton Disk Doctor messages

There are several types of messages in Norton Disk Doctor. In most cases, Norton Disk Doctor provides recommendations along with error messages. This section lists the most common messages, with general explanations.

### Driver Descriptor Map and Partition Map messages

The Driver Descriptor Map and Partition Map structures contain information about the drivers that control a hard drive as well as a listing of the locations and sizes of the volumes on a drive.

**The signature [block size / block count / driver count / driver start / driver size /driver type] is invalid.**

These problems can prevent volumes from being available.

**No partitions found.**

**The physical start block [signature / block count / logical data start / data count / partition type] is invalid [or incorrect].**

These problems can prevent volumes from being available.

## Master Directory Block and Volume Header Block messages

The Master Directory Block (MDB), located at sector 2 on an HFS-formatted volume, or the Volume Header Block (VHB) on an HFS Plus disk, contains essential bookkeeping information about a volume. This includes the number of files and folders on the disk, the amount of free disk space, the allocation block size, and the sizes and locations of such structures as the Volume Bitmap or Allocation File, the Catalog B-Tree, and the Extents B-Tree.

While the MDB or VHB is a vital structure, it is modified frequently and damage is not uncommon. In most cases, Norton Disk Doctor can easily repair problems in these areas.

The most common MDB or VHB errors are identified by these messages:

| Message  | Description  |
|--|--|
| The Free block count is incorrect.   | This is commonly associated with errors in the Volume Bitmap or Allocation File, since these structures keep track of free blocks on a volume. |
| The contents of the allocation file(bitmap) do not agree with the locations of all files as shown in the Catalog.  | These problems should be repaired whenever they occur, as they can lead to file damage through cross-linked files.                             |
| The signature is incorrect.<br>The attributes are incorrect.<br>The creation date [or modification date] is invalid.   | These messages usually indicate that the structure is damaged.   |
| The total file count [total directory count] is incorrect.<br>The allocation block size [count of allocation blocks] is incorrect.   | These messages indicate that the structure of the volume is incorrect and files might be inaccessible.   |
| The next available file ID is incorrect.<br>The Extents [or Catalog] B-Tree clump size is invalid.<br>The physical size of the Extents [or Catalog] B-Tree is incorrect.<br>Invalid extents are specified for the Extents [or Catalog] B-Tree. | These messages might indicate that the directories have been damaged.  |

## B-Tree node messages

A B-Tree node is a sector or group of sectors in the Catalog or Extents B-Tree. These sectors contain important data about files on a volume. The following messages indicate problems with nodes in any B-Tree. If you see one of the following messages, you might have found some files or folders to have been inaccessible.

**The node has an incorrect [forward link / backward link / type / depth / record count].**

**The node is on an incorrect level.**

**The node has incorrect offsets.**

These error messages indicate that there is damage to a disk directory.

## B-Tree header messages

The B-Tree header nodes contain important information about the structure of the Catalog and Extents B-Trees, which contain information about the files on a volume. If you see one of the following messages, you might have found some files or folders to have been inaccessible.

**The tree depth [node size / key length / tree attribute flags] is / are incorrect.**

**The number of nodes [free node count / tree bitmap / root node number / first leaf node number / last leaf node number / leaf record count / tree header structure] is incorrect.**

These messages are caused by problems with any B-Tree header. They indicate damage to your disk directories and they might cause problems if you're trying to mount a disk.

## Catalog tree messages

The Catalog tree contains essential bookkeeping information, including the physical locations, names, and sizes of files and folders. It also contains data such as file types and creators, and the number of files contained by a folder. The following are Catalog tree messages.

**General tree error.**

When this error occurs, you might have seen a message that the disk cannot be mounted because it cannot be found.

### There is no root directory.

This error indicates that an important part of the Catalog B-Tree is damaged or missing.

### Record messages.

This error indicates damage to your directories.

**The record has an incorrect key length [incorrect key / incorrect length].**

**The record is out of order.**

**The record key is duplicated.**

**The leaf record has an incorrect type.**

**The index record has an incorrect downlink.**

These errors can cause files to disappear or be inaccessible.

## Catalog tree leaf node messages

A leaf node is a node in the Catalog B-Tree or Extents B-Tree that contains file records or extents records. File records contain information about files that are stored on a disk, including their sizes, types and creators, attributes, and the physical locations of their data. Extents records contain the physical locations of those portions of fragmented files that are not tracked in the Catalog tree. The following are Catalog tree leaf node error messages.

**The leaf record has an invalid name.**

**<filename> has a duplicated ID.**

**No thread record found for <filename>.**

**No parent directory found for <filename>.**

**The leaf record has an incorrect Parent ID.**

These errors can cause files to disappear or folders to appear empty.

## Catalog tree file record messages

The following are Catalog tree file record messages.

**<filename> has an incorrect clump size [extent starting block number / extent length / data (or resource) starting block number / logical length / physical length].**

**<filename> has an empty extent descriptor.**

These errors cause files to be damaged.

## Directory and file thread record messages

If you see directory and file thread record messages, it might mean that some folders might be empty or can't be opened. File thread record errors are not as serious as directory thread records, but should be fixed. The following are directory and file thread record messages.

**Thread record <filename> has an invalid target Parent ID.  
The thread record has an invalid target name.**  
**Thread record <filename> has an invalid reserved byte.**  
**No directory [or file] found for thread record <filename>.**  
**The thread record does not point to its associated file [associated directory].**  
**Thread record <filename> points to a file [or directory].**  
**The file thread flag for <filename> is off but should be on [on but should be off].**

These errors indicate that there is damage to a disk directory.

**The thread record is unnecessarily large, and is wasting space.**

This message does not indicate damage, but should be fixed.

## Extents tree messages

The Extents B-Tree keeps track of extents (fragments) of fragmented files that are not stored in the Catalog B-Tree. The following are Extents tree messages.

**The extent record does not match a known file.**  
**The extent record has an invalid fork ID.**  
**The extent record has an empty descriptor.**  
**The extent record has an incorrect key [starting block number / block count].**

These messages usually indicate that some files are damaged or lost.

## File messages

File errors affect only the files that are listed and do not otherwise affect the validity of the structures of your disk.

If System files are causing malfunctions or you suspect that they are causing problems, delete them. Damaged System files or applications might cause your computer's operation to be affected. However, some files might contain irregularities that can cause Norton Disk Doctor to flag them

as damaged, even when they are functioning normally. The following are file messages.

| File messages  | Description   |
|--|---|
| The files are crosslinked and might be damaged.  | A cross-linked file shares at least part of its space on a disk with another file, which damages one or both files. Examine all files after fixing them. If the files cannot be fixed or are damaged, delete them from your disk. |
| The file names begin with a period.  | Many files use this convention, and you should not fix this problem if Norton Disk Doctor alerts you.   |
| The bundle bit is off, but should be on [on, but should be off].<br>The custom icon bit is off, but should be on [on, but should be off].  | These types of messages might indicate that a file's icon is incorrectly displayed in the Finder.   |
| The file names contain a colon, which is an illegal character.<br>The files have damaged resource forks.<br>The files have bad creation dates [modification dates / backup dates]. | Fixing these problems sets the incorrect date to match other correct dates or the current date in the file record.  |
| The Finder information is incorrect.   | This indicates a corruption of the flags that control how the Finder displays a file.   |
| The file names contain a NUL (ASCII zero) character.   | The NUL character can't be typed on the keyboard.   |

## Hardlink messages

Hardlinks are used in Mac OS X to make files appear in more than one folder. A hardlink is similar to an *alias*. It lets the same file be accessed from multiple locations. Like UNIX, Mac OS X lets you create hardlinks to existing files.

When you create a hardlink, the following process occurs:

- Your original file is renamed as inode###, where the ### symbols indicate a randomly generated ID.
- This renamed file is moved to an invisible directory named HFS+ Private Data at the root of your drive.
- Mac OS X creates hardlink files that use the original file's name at your original file's location and wherever you create a hardlink. There is no limit to the number of hardlink files. The inode file keeps track of them all.

Opening a hardlink file is the same as opening the original file. If you delete a hardlink file, the system changes the hardlink count in the inode file.

When you delete the last hardlink file, the count goes to zero, and the original file (the inode file) is also deleted.

Norton Disk Doctor displays the following messages if hardlink problems are found.

| Message  | Description   |
|--|---|
| No hardlink files reference the indirect files.              | If no hardlink files to your original file (the inode file) exist, you can't access your original file. This situation can arise if you accidentally delete hardlink files while your computer is started in Mac OS 9.x, or if there is directory corruption. Norton Disk Doctor repairs this by creating a new hardlink file for the inode. The new hardlink file is placed in the Lost and Found folder created by Norton Disk Doctor.                                |
| The indirect files have incorrect hardlink reference counts. | If the inode file's count of the number of hardlinks is incorrect, the Mac OS X Finder can experience trouble when it tries to keep track of the hardlinks. This situation can arise if you accidentally delete or duplicate hardlink files while your computer is started in Mac OS 9.x, or if a directory was corrupted. Norton Disk Doctor repairs this problem by adjusting the inode reference count to match the number of hardlinks that are found on the drive. |

| Message  | Description   |
|--|---|
| No target files were found for the hardlink files. | If there is no target (inode) file for a hardlink, the hardlink has no data to access and is useless. This situation arises if you accidentally delete inode files while your computer is started in Mac OS 9.x, or if there is directory corruption. Norton Disk Doctor helps eliminate these useless files by letting you delete them.  |
| The BSD mode for the files is incorrect.           | BSD flag bits help Mac OS X classify files and folders. In order for file hardlinks to work properly if the item is a file, the file being linked to must have its BSD mode properly set. This problem can arise through directory corruption and can prevent hardlinks from working. Norton Disk Doctor can fix this by resetting the BSD mode.<br><br>The current version of Mac OS X does not use the BSD file bit except when files are hardlinked, and so, for any nonhardlinked file, the file mode should be zero. The Mac OS X Finder can experience problems if the BSD mode is set to an invalid value. This problem can arise through directory corruption. Norton Disk Doctor can fix this by resetting the BSD mode. |

# Service and support solutions

The Service & Support Web site at <http://service.symantec.com> supports Symantec products. Customer Service helps with nontechnical issues such as orders, upgrades, replacements, and rebates. Technical Support helps with technical issues such as installing, configuring, or troubleshooting Symantec products.

Methods of technical support and customer service can vary by region. For information on support offerings in your region, check the appropriate Web site listed in the sections that follow.

If you received this product when you purchased your computer, your computer manufacturer may be responsible for providing your support.

## Customer service

The Service & Support Web site at <http://service.symantec.com> tells you how to:

- Subscribe to Symantec newsletters.
- Locate resellers and consultants in your area.
- Replace defective CD-ROMs and manuals.
- Update your product registration.
- Find out about orders, returns, or a rebate status.
- Access Customer Service FAQs.
- Post a question to a Customer Service representative.
- Obtain product information, literature, or trialware.

For upgrade orders, visit the Symantec Store at:  
<http://www.symantecstore.com>

## Technical support

Symantec offers two technical support options for help with installing, configuring, or troubleshooting Symantec products:

- Online Service and Support

Connect to the Symantec Service & Support Web site at <http://service.symantec.com>, select your user type, and then select your product and version. You can access hot topics, Knowledge Base articles, tutorials, contact options, and more. You can also post a question to an online Technical Support representative.

- PriorityCare telephone support

This fee-based (in most areas) telephone support is available to all registered customers. Find the phone number for your product at the Service & Support Web site. You'll be led through the online options first, and then to the telephone contact options.

## Support for old and discontinued versions

When Symantec announces that a product will no longer be marketed or sold, telephone support is discontinued 60 days later. Technical information may still be available through the Service & Support Web site at:

<http://service.symantec.com>

## Subscription policy

If your Symantec product includes virus, firewall, or Web content protection, you may be entitled to receive updates via LiveUpdate. Subscription length varies by Symantec product.

After your initial subscription ends, you must renew it before you can update your virus, firewall, or Web content protection. Without these updates, you will be vulnerable to attacks.

When you run LiveUpdate near the end of your subscription period, you are prompted to subscribe for a nominal charge. Simply follow the instructions on the screen.

## Worldwide service and support

Technical support and customer service solutions vary by country. For Symantec and International Partner locations outside of the United States, contact one of the service and support offices listed below, or connect to <http://service.symantec.com> and select your region under Global Service and Support.

## Service and support offices

### **North America**

Symantec Corporation  
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<http://www.symantec.com/>

### **Australia and New Zealand**

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Sydney  
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However, the information contained herein is subject to change without notice. Symantec Corporation reserves the right for such change without prior notice.

April 2, 2003



# Glossary

|                          |  |
|--------------------------|--|
| <b>access privileges</b> | The types of operations that a user can perform on a system resource. For example, a user can have the ability to access a certain directory and open, modify, or delete its contents. |
| <b>ActiveSync</b>        | The synchronization software for Microsoft Windows-based Pocket PCs.   |
| <b>ActiveX</b>           | A method of embedding interactive programs into Web pages. The programs, which are called controls, run when you view the page.  |
| <b>alert</b>             | A message that appears to signal that an error has occurred or that there is a task that requires immediate attention, such as a system crash or a Virus Alert.                        |
| <b>alias</b>             | A shortcut icon that points to an original object such as a file, folder, or disk.   |
| <b>AppleTalk</b>         | A protocol that is used by some network devices such as printers and servers to communicate.   |
| <b>attack signature</b>  | A data pattern that is characteristic of an Internet attack. Intrusion Detection uses attack signatures to distinguish attacks from legitimate traffic.                                |
| <b>beam</b>              | To transfer certain programs and data between two handheld devices using built-in infrared technology.   |

|   |   |
|---|---|
| <b>boot record</b>                                | A sector at the start of a disk that describes the disk (sector size, cluster size, and so on). On startup disks, the boot record also has a program that loads the operating system.                       |
| <b>bootable disk</b>                              | A disk that can be used to start a computer.  |
| <b>cache</b>                                      | A location on your disk in which data is stored for reuse. A Web browser cache stores Web pages and files (such as graphics) as you view them.  |
| <b>cache file</b>                                 | A file that is used to improve the performance of Windows.  |
| <b>compressed file</b>                            | A file whose content has been made smaller so that the resulting data occupies less physical space on the disk.   |
| <b>connection-based protocol</b>                  | A protocol that requires a connection before information packets are transmitted.   |
| <b>connectionless protocol</b>                    | A protocol that sends a transmission to a destination address on a network without establishing a connection.   |
| <b>cookie</b>                                     | A file that some Web servers put on your disk when you view pages from those servers. Cookies store preferences, create online shopping carts, and identify repeat visitors.                                |
| <b>denial-of-service attack</b>                   | A user or program that takes up all of the system resources by launching a multitude of requests, leaving no resources, and thereby denying service to other users.   |
| <b>DHCP (Dynamic Host Configuration Protocol)</b> | A TCP/IP protocol that assigns a temporary IP address to each device on a network. DSL and cable routers use DHCP to allow multiple computers to share a single Internet connection.                        |
| <b>dial-up</b>                                    | A connection in which a computer calls a server and operates as a local workstation on the network.   |
| <b>DNS (Domain Name System)</b>                   | The naming system used on the Internet. DNS translates domain names (such as <a href="http://www.symantec.com">www.symantec.com</a> ) into IP addresses that computers understand (such as 206.204.212.71). |

|   |   |
|---|---|
| <b>DNS server<br/>(Domain Name System server)</b> | A computer that maps domain names to IP addresses. When you visit <a href="http://www.symantec.com">www.symantec.com</a> , your computer contacts a DNS server that translates the domain name into an IP address (206.204.212.71). |
| <b>domain</b>                                     | The common Internet address for a single company or organization (such as <a href="http://symantec.com">symantec.com</a> ). See also host name.   |
| <b>DOS window</b>                                 | A method of accessing the MS-DOS operating system to execute DOS programs through the Windows graphical environment.  |
| <b>download</b>                                   | To transfer a copy of a file or program from the Internet, a server, or computer system to another server or computer.  |
| <b>driver</b>                                     | Software instructions for interpreting commands for transfer to and from peripheral devices and a computer.   |
| <b>encryption</b>                                 | Encoding data in such a way that only a person with the correct password or cryptographic key can read it. This prevents unauthorized users from viewing or tampering with the data.  |
| <b>Ethernet</b>                                   | A common method of networking computers in a LAN (local area network). Ethernet cables, which look like oversized phone cables, carry data at 10M bps or 100M bps.  |
| <b>executable file</b>                            | A file containing program code that can be run. Generally includes any file that is a program, extension, or system files whose names end with .bat, .exe, or .com.   |
| <b>extension</b>                                  | The three-letter ending on a file name that associates the file with an activity or program. Examples include .txt (text) and .exe (executable program).  |
| <b>FAT (file allocation table)</b>                | A system table (used primarily by DOS and Windows 9x/Me) that organizes the exact location of the files on the hard drive.  |
| <b>file type</b>                                  | A code that associates the file with a program or activity, often appearing as the file name extension, such as .txt or .jpeg.  |

|  |   |
|--|---|
| <b>Finder</b>                                    | The program that manages your Macintosh disk and file activity and display.   |
| <b>firewall rule</b>                             | Parameters that define how a firewall reacts to specific data or network communications. A firewall rule usually contains a data pattern and an action to take if the pattern is found. |
| <b>fragmented</b>                                | When the data that makes up a file is stored in noncontiguous clusters across a disk. A fragmented file takes longer to read from the disk than an unfragmented file.                   |
| <b>fragmented IP packet</b>                      | An IP packet that has been split into parts. Packets are fragmented if they exceed a network's maximum packet size, but malicious users also fragment them to hide Internet attacks.    |
| <b>FTP (File Transfer Protocol)</b>              | An application protocol used for transferring files between computers over TCP/IP networks such as the Internet.  |
| <b>hidden attribute</b>                          | A file attribute that makes files harder to access and more difficult to delete than other files. It also prevents them from appearing in a DOS or Windows directory list.              |
| <b>host name</b>                                 | The name by which most users refer to a Web site. For example, www.symantec.com is the host name for the Symantec Web site. Host names are translated to IP addresses by the DNS.       |
| <b>HotSync</b>                                   | The synchronization software for Palm OS handheld devices.  |
| <b>HTML (Hypertext Markup Language)</b>          | The language used to create Web pages.  |
| <b>ICMP (Internet Control Message Protocol)</b>  | An extension to the basic Internet Protocol (IP) that provides feedback about network problems.   |
| <b>IGMP (Internet Group Management Protocol)</b> | An extension to the basic Internet Protocol (IP) that is used to broadcast multimedia over the Internet.  |

|   |  |
|---|--|
| <b>IMAP4 (Internet Message Access Protocol version 4)</b> | One of the two most popular protocols for receiving email. IMAP makes messages available to read and manage without downloading them to your computer.                                 |
| <b>infrared (IR) port</b>                                 | A communication port on a handheld device for interfacing with an infrared-capable device. Infrared ports do not use cables.   |
| <b>IP (Internet Protocol)</b>                             | The protocol that underlies most Internet traffic. IP determines how data flows from one computer to another. Computers on the Internet have IP addresses that uniquely identify them. |
| <b>IP address (Internet Protocol address)</b>             | A numeric identifier that uniquely identifies a computer on the Internet. IP addresses are usually shown as four groups of numbers separated by periods. For example, 206.204.52.71.   |
| <b>ISP (Internet service provider)</b>                    | A company that supplies Internet access to individuals and companies. Most ISPs offer additional Internet connectivity services, such as Web site hosting.                             |
| <b>Java</b>   | A programming language used to create small programs called applets. Java applets can be used to create interactive content on Web pages.  |
| <b>JavaScript</b>   | A scripting language used to enhance Web pages. Most sites use JavaScript to add simple interactivity to pages, but some use it to open pop-up ads and reset visitors' homepages.      |
| <b>macro</b>  | A simple software program that can be started by a specific keystroke or a series of keystrokes. Macros can be used to automate repetitive tasks.                                      |
| <b>NAT (network address translation)</b>                  | A method of mapping private IP addresses to a single public IP address. NAT allows multiple computers to share a single public IP address. Most DSL and cable routers support NAT.     |
| <b>network address</b>                                    | The portion of an IP address that is shared by all computers on a network or subnet. For example, 10.0.1.1 and 10.0.1.8 are part of the network address 10.0.1.0.                      |

|  |   |
|--|---|
| <b>NTFS (NTFS file system)</b>               | A system table (used primarily by Windows 2000/XP) that organizes the exact location of all the files on the hard drive.  |
| <b>packet</b>                                | The basic unit of data on the Internet. Along with the data, each packet includes a header that describes the packet's destination and how the data should be processed.                  |
| <b>partition</b>                             | A portion of a disk that is prepared and set aside by a special disk utility to function as a separate disk.  |
| <b>POP3 (Post Office Protocol version 3)</b> | One of the two most popular protocols for receiving email. POP3 requires that you download messages to read them.   |
| <b>port</b>                                  | A connection between two computers. TCP/IP and UDP use ports to indicate the type of server program that should handle a connection. Each port is identified by a number.                 |
| <b>port number</b>                           | A number used to identify a particular Internet service. Internet packets include the port number to help recipient computers decide which program should handle the data.                |
| <b>PPP (Point-to-Point Protocol)</b>         | A protocol for communication between two computers using a dial-up connection. PPP provides error-checking features.  |
| <b>protocol</b>                              | A set of rules governing the communication and transfer of data between computers. Examples of protocols include HTTP and FTP.  |
| <b>proxy</b>                                 | A computer or program that redirects incoming and outgoing traffic between computers or networks. Proxies are often used to protect computers and networks from outside threats.          |
| <b>registry</b>                              | A category of data stored in the Windows registry that describes user preferences, hardware settings, and other configuration information. Registry data is accessed using registry keys. |
| <b>removable media</b>                       | Disks that can be removed, as opposed to those that cannot. Some examples of removable media are floppy disks, CDs, DVDs, and Zip disks.  |

|  |   |
|--|---|
| <b>router</b>  | A device that forwards information between computers and networks. Routers are used to manage the paths that data takes over a network. Many cable and DSL modems include routers.        |
| <b>script</b>  | A program, written in a scripting language such as VBScript or JavaScript, that consists of a set of instructions that can run without user interaction.                                  |
| <b>service</b>   | General term for the process of offering information access to other computers. Common services include Web service and FTP service. Computers offering services are called servers.      |
| <b>SSL (Secure Sockets Layer)</b>  | A protocol for secure online communication. Messages sent using SSL are encrypted to prevent unauthorized viewing. SSL is often used to protect financial information.                    |
| <b>subnet</b>  | A local area network that is part of a larger intranet or the Internet.   |
| <b>subnet mask</b>   | A code, in the form of an IP address, that computers use to determine which part of an IP address identifies the subnet and which part identifies an individual computer on that subnet.  |
| <b>synchronize</b>   | The process by which a handheld device and computer compare files to ensure that they contain the same data.  |
| <b>sync</b>  | The process of transferring programs and data from a computer to a handheld device.   |
| <b>TCP/IP<br/>(Transmission Control Protocol/<br/>Internet Protocol)</b> | Standard protocols used for most Internet communication. TCP establishes connections between computers and verifies that data is properly received. IP determines how the data is routed. |
| <b>threat</b>  | A program with the potential to cause damage to a computer by destruction, disclosure, modification of data, or denial of service.  |
| <b>Trojan horse</b>  | A program containing malicious code that is disguised as or hiding in something benign, such as a game or utility.  |

|                                     |  |
|-------------------------------------|--|
| <b>UDP (User Datagram Protocol)</b> | A protocol commonly used for streaming media. Unlike TCP, UDP does not establish a connection before sending data and it does not verify that the data is properly received.   |
| <b>virus definition</b>             | Virus information that an antivirus program uses to identify and alert you to the presence of a specific virus.  |
| <b>wildcard characters</b>          | Special characters (like *, \$, and ?) that act as placeholders for one or more characters. Wildcards let you match several items with a single specification.   |
| <b>worm</b>                         | A program that replicates without infecting other programs. Some worms spread by copying themselves from disk to disk, while others replicate only in memory to slow a computer down. So far, worms do not exist in the Macintosh world. |

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